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ABSTRACT

These second and third volumes of a four-volume study of manpower in state highway safety programs over the next decade estimate manpower resources by state and in national aggregate and describe present and planned training programs for safety specialists. For each educational level, both total manpower and manpower actually available for government employment are projected. Highway safety courses and curriculums are inventoried, including enrollment projections for each program. Training capacity is estimated. Volume I, which estimates manpower needs, and Volume IV, conclusions and recommendations, are available as VT 013 321 and VT 013 323. (BH)

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Safety Specialist Manpower
Manpower Resources and Manpower Training
Volume II and Volume III

Prepared for National Highway Safety Bureau
U.S. DEPARTMENT OF TRANSPORTATION
Washington, D.C.

BOOZ • ALLEN & HAMILTON Inc.
Management Consultants

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Safety Specialist Manpower

Manpower Resources

Volume II

The National Highway Safety Bureau
U.S. DEPARTMENT OF TRANSPORTATION
Washington, D.C.

Prepared under Contract No. FH-11-6496 with U.S. Department of Transportation, National Highway Safety Bureau.

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Safety Bureau.

October 14, 1968

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October 14, 1968

Dr. William Tarrants
National Highway Safety Bureau
Department of Transportation
Washington, D. C.

Reference: Contract FH-11-6496, "Safety Specialist Manpower"

Dear Dr. Tarrants:

We are pleased to transmit to you this report on state safety manpower resources. This report is the second of four volumes on the subject of staffing state highway safety programs.

The report estimates, for each state and the nation, the size of the manpower resource pool available to staff state highway safety programs. Estimates are provided for 1968 through 1977, by year, for each of three skill level categories: high school, one to three years of college, and college graduates. Additionally, manpower requirements estimates developed in Volume I are matched to resource estimates for high school and college skill levels.

Analysis of resource and requirements estimates indicates that, if current recruitment practices of state governments are continued, a deficiency could develop in the number of safety specialists employed in state highway safety programs. The deficiency potentially exists at both high school and college skill levels.

The analysis contained in this volume is based on data collected from national sources. The design of study methodology, discussed at length in the body of the report, was refined through interviews with officials of public and private agencies with particular expertise in the field of manpower projections.

Manpower resource estimates are derived from a formula that incorporates considerations of state population size, population mobility, educational attainment, and state government employment levels. At each skill level, two estimates of resources are provided. One estimates the total population with the required skill level; the other estimates the number of persons with the required skill level who are actually available to the state government for employment.

We would like to express our thanks to the National Highway Safety Bureau and to the officials of public and private organizations who gave us their aid and cooperation throughout this assignment.

Very truly yours,

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I. INTRODUCTION

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Volume I of the safety specialist manpower study identifies four general areas of information needed to plan the staffing of state highway safety programs. These areas of information concern:

- Types and numbers of personnel needed
- The manpower resources pool available to fill the need
- Programs available to train personnel for state highway safety jobs
- Steps that can be taken to staff state highway safety programs

Volume I deals with the first of these information areas; Volumes III and IV deal with the third and fourth of the information areas respectively. This volume, Volume II, deals with the second of the information areas: manpower resources.

1. THIS VOLUME PRESENTS ESTIMATES OF THE NUMBER OF PERSONS AVAILABLE TO STAFF SAFETY SPECIALIST JOBS

This volume presents estimates of the magnitude of the manpower pool which may be drawn upon to fill state highway safety specialist jobs. The pool is divided into three skill levels.

- High school graduates
- Persons with 1 to 3 years of college
- College graduates

Estimates of the numbers of people 21 years of age and older who have or will have attained these skill levels are provided by year for the period 1968 to 1977. Two estimates are provided for each state and for the nation. One gives the total number of people in the state (or nation) with that skill level; the other gives the actual number out of the total which can be expected to be available for employment by state governments. In addition, the state and national manpower requirements that are identified in Volume I have been grouped by high school skill level and college skill level categories and are presented for comparison with the resource estimates.

Analysis of the estimates presented in Chapter III, Findings and Observations, demonstrates a potential deficiency in manpower resources for highway safety programs may develop.

II. METHODOLOGY

II. METHODOLOGY

Persons in the manpower pool who are available to highway safety programs are also available for employment by other employers. Determination of the amount of manpower available to highway safety programs, therefore, should consider the size of the total pool, the portion of the pool that is likely to be most immediately available to highway safety, and an estimate of the difficulty of enlarging this portion if it is necessary to do so. The methodology used in this report is designed to accomplish these ends.

1. THIS STUDY IS BASED ON DATA FROM NATIONALLY AVAILABLE SOURCES

During pilot visits to California, Minnesota, and Massachusetts, Booz, Allen & Hamilton's staff found that: (1) manpower resource data available in the states are no better in quality than manpower resource data available from the Federal Government and other Washington sources; and (2) required manpower resource data are more readily available from Washington sources than from state governments. For these reasons, data on manpower resources were drawn from sources in Washington.

2. STUDY METHODOLOGY WAS DEVELOPED AFTER EXTENSIVE LITERATURE REVIEW AND PERSONAL INTERVIEWING

To determine the information already available on manpower resource projections, a review of literature in the field was undertaken. Particular attention was devoted to identifying the types of manpower for which projections had been made, the methodologies used, and the problems encountered. The literature that was reviewed included:

- The Long-Range Demand for Scientific and Technical Personnel, National Science Foundation
- Manpower Planning in a Free Society, Richard A. Lester, Princeton: Princeton University Press, 1966
- Manpower Projections: An Appraisal and a Plan of Action, U. S. Department of Labor, Manpower Administration
- Manpower Report to the President, U. S. Department of Labor
- Manpower in State and Local Government, 1965 and 1975, U. S. Department of Labor, Bureau of Labor Statistics
- Projections of Educational Statistics to 1975-76, U. S. Department of Health, Education, and Welfare, Office of Education
- Scientific and Technical Manpower Resources, National Science Foundation

At the same time, interviews were conducted with officials of organizations specializing in projecting manpower resources. Officials from the following organizations were interviewed.

- Bureau of the Census, U. S. Department of Commerce
- Bureau of Labor Statistics, U. S. Department of Labor
- National Planning Association
- Office of Manpower Research, U. S. Department of Labor

Information gathered from these sources was used by the Booz, Allen & Hamilton staff in refining the study methodology.

3. THE STUDY EXAMINES THE RATIO OF REQUIREMENTS TO SUPPLY

Interviews on manpower analysis methodology yielded one major conclusion: most of the better work in projecting manpower for operating programs has occurred on the demand or requirements side of the supply/demand equation and has assumed that supply will equal demand. However, underlying this equilibrium assumption are several other assumptions.

- Total supply for all programs equals or exceeds total demand for all programs (or demand in some programs will necessarily go unfilled) or, alternatively, demand in the particular program under study is a relatively small proportion of total supply (so that the limits of total supply are not pressed).
- Satisfaction of the demands of a particular program is a problem of distribution within the total supply.
- Distribution of supply is flexible and can be influenced.

Interviewees indicated that these assumptions appeared applicable to the national highway safety program and specifically believed that safety specialist requirements could be filled by a small proportion of the available supply of manpower.

The overall methodology used in this study draws upon the above approach. It:

- Examines the ratio of safety manpower requirements (demand) to manpower availability (supply)
- Examines the change in that ratio during the period 1968-1977
- Assumes that if the ratio remains constant or declines over 1968-1977, no resource problem exists; and, conversely, to the extent the ratio increases, a resource problem does exist and steps are required to draw resources from the manpower pool into highway safety programs. (The 1968 "requirements" are manpower already employed.)

These are the fundamental elements of the methodology used to attack the supply problem and form the framework into which this volume fits. This volume is concerned with estimating the supply rather than reaching conclusions about the relationship between supply and demand; that relationship is the subject of Volume IV.

4. MANPOWER RESOURCE ESTIMATES INCLUDE PERSONS 21 YEARS OF AGE AND OLDER

Although the job descriptions included in Volume I do not specify entering age requirements, the bulk of state safety specialist manpower requirements fall in job titles almost certainly calling for persons 21 years of age or older. Furthermore, most civil service positions are limited to persons 21 years of age or older. For these reasons, resource estimates are provided for persons 21 years of age and older and omit the age group 17-21.

5. MANPOWER ESTIMATES ARE CATEGORIZED INTO HIGH SCHOOL GRADUATES, PERSONS WITH ONE TO THREE YEARS OF COLLEGE, AND COLLEGE GRADUATE SKILL LEVELS

To provide an estimate of total manpower which might be drawn upon to staff highway safety programs, the total resource pool is categorized broadly into high school graduates and college graduates. This division matches a basic distinction between entering education requirements specified in the safety specialist job descriptions contained in Volume I. Additionally, persons with one to three years of college constitute a manpower resource to be drawn upon, if needed, with the potential of staffing jobs with either high school graduate or college graduate entrance requirements. Therefore, a third category for persons with one to three years of college is provided. Manpower resource estimates are organized into these three categories. (However, since no job title specifically requires one to three years of college training, there are no manpower requirements to match against this resource category.)

6. THE STUDY SUPPLIES ESTIMATES OF MANPOWER IMMEDIATELY AVAILABLE TO STATE GOVERNMENTS

Two estimates are offered for each of the above three categories. One is labeled "Estimated Total Manpower" and refers to all persons 21 years of age or older within the state (or nation) with the requisite skill level. This represents the total resource pool. However, not everyone in this total pool is actually available for state government employment. Many do not wish to work for state governments. To narrow the pool to those really available for state government employment, a second estimate labeled "Estimated Manpower Available" is given. It is based on the 1966 ratio of state government employees for the state (or nation) to total state (or national) population and assumes that the distribution of skill levels among state government employees corresponds to the distribution among the total state population. Relying on actual state government employees allows for all factors discouraging employment with state governments and yields an estimate of the net resource pool immediately available for state government employment. Beyond this, by basing the ratio on 1966 state employment, a conservative estimate is obtained, for the trend has been for state government employment to increase rapidly.

7. THE SAME GENERAL FORMULA IS USED TO ESTIMATE RESOURCES FOR ALL SKILL LEVELS

The same general formula is used to estimate manpower resources for high school graduates, persons with one to three years of college, and college graduate skill levels. This formula for estimating safety specialist manpower resources is as follows:

- Estimated total manpower = A x B
- Estimated manpower available = estimated total manpower x C, where:

A = The state population 21 years of age and older for the year in which the estimated total manpower is being calculated.

B = The percentage of A with the required skill level, i. e., that skill level for which manpower resources are being calculated: high school, 1-3 years of college, or college.

C = The percentage of A working for the state government.

The state population 21 years of age and older is itself an estimate based upon data contained in U. S. Bureau of the Census publication Current Population Reports, Population Estimates, Revised Projections of the Population of States 1970 to 1985 (Series P-25, No. 375, October 3, 1967). The estimate was developed by:

- Estimating the total population for the state for each year 1965 to 1977. (The Bureau of the Census document provides estimates at five-year intervals.) These estimates were developed by:
  - Using the Bureau of the Census estimated 1965 state population as the base year.
  - Increasing (decreasing for West Virginia) the state population annually from the 1965 base by applying the Bureau of the Census Series I-B average annual rate of state population change for the years 1965-1975. Series I-B assumes that migration rates will continue within the range observed in 1955-1960 and 1960-1965 and that fertility will increase moderately from present levels. In this way, population mobility was accommodated.
- Multiplying each year's estimated total state population by the average 1965 to 1980 percentage of the total state population that is 21 years of age and older. The average percentage was derived from the Bureau of the Census Series I-B population estimates.

The percentage of the state population 21 years of age and older (A) with the required skill level is based upon data from the Statistical Abstract of the United States, 1967 and Current Population Reports, Population Characteristics, Educational

Attainment: March 1967 (Series P-20, No. 169, February 9, 1968), both Bureau of the Census publications. The Abstract gives total population of the state 25 years old and older in 1960 and the number of people in the state with four years of high school, one to three years of college, and four or more years of college. From these data, the percentage of the 1960 state population 25 years of age and older with the required skill levels was derived.

- It was then assumed that the percentage of state population 21 years of age and older with the required skill level is identical with that percentage for 25 years of age and older.
- On the above assumption, the percentage of population 21 years of age and older was obtained for each year by increasing the 1960 derived percentage by an annual amount equal to the average annual national growth from 1947 to 1967. The average annual national growth was calculated from data in the Bureau of the Census publication Educational Attainment.

From the state population 21 years of age and older (A) and the percentage of (A) with the required skill level (B), the estimated total manpower was calculated. To obtain the estimated manpower available, the remaining portion of the formula, percentage of (A) working for the state government, was applied.

The Statistical Abstract gives numbers of state government employees by state in 1966. From this and the estimated 1966 state population 21 years of age and older, the 1966 percentage of the state population 21 years of age and older working for the state government was obtained. It was then assumed that this derived proportion of the state population immediately available to work for the state government would not change from the 1966 percentage, and the 1966 percentage was used for all years. This approach also assumes that the distribution of skill levels among persons immediately available to work for the state government is the same as among the entire state population.

- A modification was made in computing college skill level estimated manpower available. Because a major portion of college graduate manpower requirements are for Driver Education Teachers, the manpower pool, to be comparable, must include teachers. As a practical matter, both elementary and secondary teachers have two fundamental characteristics necessary for many safety specialist positions: a college education and an indicated willingness to work in public agency programs. Therefore, estimated manpower at the college skill level available includes a separate calculation of primary and secondary teachers. Calculation of these totals was accomplished by:
    - Calculating, as explained above, estimated manpower available exclusive of teachers
    - Estimating primary and secondary teachers available in the state by year by
        - Deriving the proportion of the total 1966 state population 21 years of age and older who were teachers; these derivations are based upon teacher counts contained in the Digest of Educational Statistics, 1967 (U. S. Office of Education)

        - Assuming that the proportion of teachers to total state population 21 years of age and older will remain constant over 1966-1977
        - Multiplying the annual estimate of state population 21 years of age and older by the 1966 proportion that were teachers
    - Adding estimated manpower available exclusive of teachers and estimated teachers.
- For purposes of clarification, a line entry is included in college skill level manpower resource estimates labeled "Estimated Manpower Available (Teachers)" to indicate how many of the estimated manpower available are teachers.

Estimates of manpower resources obtained from these calculations are given in Appendix A. Estimates are given for each state and for the nation for each year from 1968 to 1977.

8. MANPOWER REQUIREMENTS ARE MATCHED TO RESOURCE CATEGORY

To allow comparison of resources to requirements, safety specialist manpower requirement estimates from Volume I are presented along with resource estimates in Appendix A. To do so, requirements have been grouped into high school and college skill levels, depending upon entering education requirements for safety specialist job titles. Since there are no job titles requiring one to three years of college, no requirement estimates exist for this skill level. A list showing which safety specialist job titles are allocated to the high school and college skill level categories is presented in Appendix B.

- Manpower requirements reported in this volume are based on the assumption that all states except Delaware and New Jersey will use the Motor Vehicle Station Inspector rather than the Motor Vehicle Inspector job title.
- Alternative 1 and Alternative 2 manpower requirements for Breath Examiner Specialists reported in this volume are one-fifth of those reported in Volume I. Since personnel in this job title devote one-fifth of their time to the alcohol program, man-year equivalents are equal to one-fifth of the manpower requirements. Therefore, the demand generated on the manpower resource pool is one-fifth as great as the manpower requirement. The requirement expressed by state officials is recorded as given.
- One-third of the Alternative 1 and Alternative 2 manpower requirement for Accident Site Investigators are allocated to the high school skill level (for Police Traffic Service Officers) and two-thirds to the college skill level (for Highway Engineers--Safety and Traffic Engineers). Requirements expressed by state officials are allocated completely to the college skill level.

9. THE MARGIN OF ERROR OF MANPOWER RESOURCE ESTIMATES SHOULD FALL WITHIN TOLERANCE LEVELS FOR PLANNING PURPOSES

Resource estimates are subject to errors at each step of the calculation process. However, the overall error is considered to be controlled by the initial selection of assumptions for estimating the total state population. The approach was to select the fertility assumption yielding the maximum population, fertility assumption B, and then generally to select other assumptions on a conservative basis so as to obtain a countering influence.

- The Series I migration assumption is a conservative estimate for states currently suffering a net population loss from migration and a liberal assumption for states receiving a net gain. Since a resource problem is more likely to occur for states losing than gaining from migration, the choice of the Series I assumption is considered to be appropriate.

The net effect of the assumption selection process is believed to yield a moderately optimistic estimate correct within 10 percent. For analysis, the significant point is the relationship between requirements and resources and a relatively large error in the estimate of resources is tolerable. From this standpoint, an error within 10 percent is acceptable.

III. FINDINGS AND OBSERVATIONS

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Underlying the entire safety specialist manpower study is an assumption that safety specialist requirements will not be filled "naturally"; that, in some sense, a staffing problem will exist and that conscious steps must be taken to overcome the problem. More specifically, the study assumes that requirements will be sufficiently great that continuation of current recruitment, educational, and training practices will fail to fill requirements. This chapter examines the validity of this assumption. It estimates the number of safety specialists who may be employed by year throughout the nation, assuming that current recruitment practices continue. These estimates are then compared to estimated requirements, and the potential manpower deficiencies are calculated.

1. PERSONS CURRENTLY EMPLOYED IN SAFETY SPECIALIST JOBS FORM THE BASIS FOR ESTIMATING FUTURE EMPLOYMENT

The numbers in Appendix A along the row labeled "State Manpower Needs Estimated" are the State Estimates from Volume I, consolidated by skill level. These estimates represent persons actually employed in state government safety specialist jobs in 1968. In national aggregate, these persons constitute:

- 5.6 percent of the 1968 estimated manpower available at the high school skill level
- 1.4 percent of the 1968 estimated manpower available at the college skill level

These employment percentages have been attained without recruitment efforts specifically designed to staff the national highway safety program. If these efforts are assumed to continue and to be as effective in the future as in the past, then the ratio of persons employed in safety specialist jobs to estimated manpower available should remain constant at the 1968 level. Future estimates can be estimated, then, by multiplying the figures for estimated manpower available by the 1968 percentages.

2. ESTIMATES OF EMPLOYMENT AND DEFICIENCIES HAVE BEEN DEVELOPED

Exhibits I, II, III, and IV, following this page, flow from the technique just described. They assume that current recruitment practices will continue at current effectiveness levels.

The exhibits present the alternative manpower requirements developed in Volume I, estimates of persons who would be employed as safety specialists under the assumption of continuing current

EXHIBIT I

National Highway Safety Bureau
U.S. Department of Transportation

MANPOWER DEFICIENCY--
HIGH SCHOOL SKILL LEVEL

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Estimate	36,345	43,089	47,933	49,865	51,618	53,409	55,260	56,865	57,118	57,225
Estimated Employed Resources	36,345	37,498	38,676	39,880	41,110	42,367	43,650	44,962	46,302	47,670
Deficiency	0	5,591	9,257	9,985	10,508	11,042	11,610	11,903	10,816	9,555
Alternative 1 Estimate	158,299	160,809	163,361	165,884	169,060	171,222	173,507	175,953	178,124	179,358
Estimated Employed Resources	36,345	37,498	38,676	39,880	41,110	42,367	43,650	44,962	46,302	47,670
Deficiency	121,954	123,311	124,685	126,004	127,950	128,855	129,857	130,991	131,822	131,688
Alternative 2 Estimate	51,941	52,496	53,380	54,239	55,169	55,856	56,537	57,209	57,936	58,677
Estimated Employed Resources	36,345	37,499	38,676	39,880	41,110	42,367	43,650	44,962	46,302	47,670
Deficiency	15,596	14,998	14,704	14,359	14,059	13,489	12,887	13,247	11,634	11,007

EXHIBIT II

National Highway Safety Bureau
U.S. Department of Transportation

MANPOWER DEFICIENCY--
COLLEGE SKILL LEVEL

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Estimate	28,886	31,501	34,738	35,300	35,938	36,572	37,234	37,865	37,889	37,911
Estimated Employed Resources	28,886	29,417	29,958	30,509	31,069	31,639	32,218	32,808	33,408	34,018
Deficiency	0	2,084	4,780	4,791	4,869	4,933	5,016	5,057	4,481	3,893
Alternative 1 Estimate	38,827	40,254	41,732	43,584	44,340	46,661	48,522	50,412	51,871	53,773
Estimated Employed Resources	28,886	29,417	29,958	30,509	31,069	31,639	32,218	32,808	33,408	34,018
Deficiency	9,941	10,837	11,774	13,075	13,271	15,022	16,304	17,604	18,463	19,755
Alternative 2 Estimate	19,628	20,201	20,912	21,650	22,419	23,278	24,136	25,046	26,036	27,082
Estimated Employed Resources	28,886	29,417	29,958	30,509	31,069	31,639	32,218	32,808	33,408	34,018
Deficiency	-9,258	-9,216	-9,046	-8,859	-8,650	-8,361	-8,082	-7,762	-7,372	-6,936

EXHIBIT III

National Highway Safety Bureau
U.S. Department of Transportation

MANPOWER DEFICIENCY--
HIGH SCHOOL SKILL LEVEL
(LESS POLICE TRAFFIC SERVICES)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Estimate	9,202	10,555	11,367	11,738	12,094	12,409	12,691	13,296	12,992	13,007
Estimated Employed Resources	9,202	9,494	9,792	10,097	10,408	10,726	11,051	11,384	11,723	12,069
Deficiency	0	1,061	1,575	1,641	1,686	1,683	1,640	1,912	1,269	938
Alternative 1 Estimate	43,059	44,688	46,447	48,150	50,491	51,840	53,310	54,925	56,280	55,661
Estimated Employed Resources	9,202	9,494	9,792	10,097	10,408	10,726	11,051	11,384	11,723	12,069
Deficiency	33,557	35,294	36,655	38,053	40,083	41,114	42,259	43,541	44,557	43,592
Alternative 2 Estimate	12,737	13,143	13,629	14,212	14,865	15,271	15,665	16,052	16,484	16,939
Estimated Employed Resources	9,202	9,494	9,792	10,097	10,408	10,726	11,051	11,384	11,723	12,069
Deficiency	3,535	3,649	3,837	4,115	4,457	4,545	4,614	4,668	4,761	4,870

EXHIBIT IV

National Highway Safety Bureau
U.S. Department of Transportation

MANPOWER DEFICIENCY--
COLLEGE SKILL LEVEL
(LESS DRIVER EDUCATION)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Estimate	2,536	2,955	3,379	3,371	3,441	3,505	3,578	3,654	3,657	3,659
Estimated Employed Resources	2,536	2,666	2,799	2,935	3,074	3,217	3,364	3,513	3,666	3,823
Deficiency	0	289	580	426	367	288	214	141	-9	-164
Alternative 1 Estimate	12,789	12,889	13,006	13,121	13,256	13,383	13,523	13,631	13,770	13,703
Estimated Employed Resources	2,536	2,666	2,799	2,935	3,074	3,217	3,364	3,513	3,666	3,823
Deficiency	10,252	10,223	10,207	10,186	10,182	10,166	10,159	10,118	10,104	9,880
Alternative 2 Estimate	15,621	5,636	5,690	5,759	5,800	5,893	5,929	5,978	6,057	6,140
Estimated Employed Resources	2,536	2,666	2,799	2,935	3,074	3,217	3,364	3,513	3,666	3,823
Deficiency	13,085	2,970	2,891	2,824	2,726	2,676	2,565	2.465	2,391	2,317

recruitment practices, and the difference between requirements and safety specialists employed. The estimates of persons employed were developed for each year by multiplying the estimated manpower available for that year by the 1968 percentages given above. The deficiency is the difference between estimated requirements and estimated employees.

Exhibit I offers estimated employment and deficiencies for the high school skill level; Exhibit II, for the college skill level.

As pointed out in Volume I, two programs, Police Traffic Services and Driver Education, account for the majority of safety specialist manpower requirements. Police Traffic Services requirements are included in the high school skill level category, and Driver Education requirements are included in the college skill level category. Exhibits III and IV provide an estimate of employment and deficiencies with these two programs excluded.

3. A POTENTIAL DEFICIENCY EXISTS FOR HIGH SCHOOL SKILL LEVEL SAFETY SPECIALISTS

Exhibits I and III reveal a deficiency for all years for all estimates (except the 1968 State Estimate). As shown in Exhibit I, the deficiency under the State Estimate increases from 5,600 in 1969 to 11,900 in 1975 with Police Traffic Services included and from 1,100 in 1969 to 1,900 in 1975 with Police Traffic Services excluded.

> The 1976 and 1977 deficiency for the State Estimate is understated on both Exhibits II and III because of the reluctance of state officials to estimate requirements for those future years. The 1976 and 1977 deficiencies for Exhibit I are more realistically about 12,000 to 12,500 rather than the 10,800 and 9,600 shown and for Exhibit III about 1,700 to 2,200 rather than the 1,300 and 900 shown.

The deficiency for the Alternative 1 Estimate increases at a lesser rate than that of the State Estimate for the 10-year period. With the inclusion of Police Traffic Services, the increase is 8 percent from 122,000 in 1968 to 132,000 in 1977; with the exclusion of this program, the increase is 30 percent from 34,000 in 1968 to 44,000 in 1977. The absolute increase is 10,000 people in both cases.

The deficiency for the Alternative 2 Estimate decreases when Police Traffic Services is included. It declines by 30 percent over the decade, from 15,600 in 1968 to 11,000 in 1967. When Police Traffic Services is omitted, the deficiency increases by 38 percent from 3,500 in 1968 to 4,900 in 1977.

Thus, a potential deficiency in employed resources clearly exists for high school skill level jobs.

4. A POTENTIAL DEFICIENCY EXISTS FOR COLLEGE SKILL LEVEL SAFETY SPECIALISTS

Exhibits II and IV show a deficiency in all cases during the 10 years except for the Alternative 2 Estimate with Driver Education included.

The deficiency for the State Estimate with Driver Education included increases by 140 percent from 2,100 in 1969 to 5,100 in 1975. The deficiency, with Driver Education excluded, increases from 300 in 1969 to 600 in 1970 and then declines to no deficiency after 1975.

- Again, the 1976 and 1977 deficiencies for the State Estimate are understated because of the reluctance of state officials to estimate requirements for those years. The 1976 and 1977 deficiencies for Exhibit II are more realistically about 5,000 in both years rather than the 4,500 and 3,900 shown. For Exhibit IV, the understatement is of minor consequence with the -9 and -164 shown in 1976 and 1977 accurately reflecting the fundamental point that deficiencies essentially disappear after 1975.

The deficiency for Alternative 1 doubles for the 10 years with Driver Education included. It increases from 9,900 in 1968 to 19,800 in 1977. With Driver Education excluded, the deficiency remains relatively stable, decreasing from 10,300 in 1968 to 9,900 in 1977.

The Alternative 2 Estimate with Driver Education included shows an excess of personnel in every year. (The excess is an expression of the many part-time Driver Education teachers in the program.) The excess declines, however, from 9,300 in 1968 to 6,900 in 1977. With Driver Education excluded, a deficiency exists for every year, but decreases from 3,100 in 1968 to 2,300 in 1977.

Thus, although potential deficiencies are evident for college skill level jobs, they are not so consistently evident as for high school skill level jobs.

5. POTENTIAL DEFICIENCIES ARE GREATER FOR HIGH SCHOOL SKILL LEVEL JOBS THAN FOR COLLEGE SKILL LEVEL JOBS

By comparing Exhibits I and II, it is evident that potential deficiencies for high school skill level jobs are greater than for college skill level jobs.

- At the high school skill level, deficiencies derived from the State Estimate range from 5,600 to 12,000; at the college skill level, from 2,100 to 5,000.
- At the high school skill level, deficiencies derived from the Alternative 1 Estimate range from 122,000 to 132,000; at the college skill level, from 10,000 to 20,000.
- At the high school skill level, deficiencies derived from the Alternative 2 Estimate range from 15,600 to 11,000; at the college skill level, an excess exists in every year.

The same general conclusion emerges when Exhibits III and IV are compared.

- At the high school skill level, deficiencies derived from the State Estimate range from 1,100 to 1,900; at the college skill level, from 600 to 0.
- At the high school skill level, deficiencies derived from the Alternative 1 Estimate range from 33,600 to 43,600; at the college skill level, deficiencies are relatively stable at 10,000.
- At the high school skill level, deficiencies derived from the Alternative 2 Estimate range from 3,500 to 4,800; at the college skill level, from 3,100 to 2,300.

The relative differences in deficiency levels can affect plans for staffing state highway safety programs. These staffing plans will be discussed in Volume IV.

6. ESTIMATED DEFICIENCIES DO NOT APPLY TO INDIVIDUAL STATES

Exhibits I, II, III, and IV are based on the national summary of Appendix A. They do not account for deficiencies in individual states. Therefore, one can neither infer from the estimates that a deficiency will occur in any particular state nor that deficiencies will occur in every state if current recruitment efforts are continued.

IV. CONCLUSION

IV. CONCLUSION

The contribution of this volume to the overall safety specialist manpower study is summarized in this chapter.

1. A POTENTIAL DEFICIENCY IN EMPLOYED SAFETY SPECIALISTS DOES EXIST

As pointed out in Chapter III, underlying the entire safety specialist manpower study is an assumption that past recruitment practices will fail to satisfy safety specialist manpower requirements. This study has examined the validity of that assumption. It has:

- Estimated for each state and the nation the size of the manpower resource pool available to fill safety specialist jobs
- Estimated for the nation the number of persons from that pool who may actually be employed in safety specialist jobs
- Estimated the potential national deficiency in employed safety specialists

The results of this examination generally suggest a deficiency in the number of safety specialists employed in both high school and college skill level jobs, if future recruitment efforts are limited to current recruitment practices. Between the two skill levels, the potential deficiency is greater and more consistent for jobs requiring a high school education. Thus, the evidence of this volume lends support to the validity of the foregoing assumption.

2. THE SIGNIFICANCE OF THE ESTIMATED DEFICIENCY IS EXAMINED IN VOLUME IV

Given that a deficiency in employed safety specialists may develop, the impact of the deficiency on plans to staff state highway safety programs must be examined. This examination is presented in Volume IV.

APPENDIXES

APPENDIX A

MANPOWER NEEDS AND AVAILABILITY

MANPOWER NEEDS AND AVAILABILITY

State: National

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	36,345	43,089	47,933	49,865	51,618	53,409	55,260	56,865	57,118	57,225
Alternative 1 Needs Estimated	158,299	160,809	163,361	165,884	169,060	171,222	173,507	175,953	178,124	179,358
Alternative 2 Needs Estimated	51,941	52,496	53,380	54,239	55,169	55,856	56,537	57,209	57,936	58,677
Estimated Manpower Availability	647,646	668,191	689,189	710,640	732,564	754,961	777,830	801,209	825,080	849,461
Estimated Total Availability (000's)	34,267	35,354	36,465	37,600	38,760	39,945	41,155	42,392	43,655	44,945
One- to Three-Year College Skill Level										
Estimated Manpower Availability	235,513	243,394	251,465	259,705	268,134	276,734	285,541	294,519	303,704	313,097
Estimated Total Availability (000's)	12,461	12,878	13,305	13,741	14,187	14,642	15,108	15,583	16,069	16,566
Four-Year College Skill Level										
State Manpower Needs Estimated	28,886	31,501	34,738	35,300	35,938	36,572	37,234	37,865	37,889	37,911
Alternative 1 Needs Estimated	38,827	40,254	41,732	43,584	44,340	46,661	48,522	50,412	51,871	53,773
Alternative 2 Needs Estimated	19,628	20,201	20,912	21,650	22,419	23,278	24,136	25,046	26,036	27,082
Estimated Manpower Availability	2,080,004	2,118,321	2,157,278	2,196,919	2,237,249	2,278,286	2,320,027	2,362,472	2,405,674	2,449,633
Estimated Manpower Availability (Teachers)	1,833,170	1,858,843	1,884,853	1,911,245	1,938,005	1,965,132	1,992,641	2,020,533	2,048,823	2,077,511
Estimated Total Availability (000's)	13,060	13,729	14,414	15,115	15,833	16,569	17,322	18,092	18,881	19,689

Note: In this appendix, Estimated Total Availability should be read as Estimated Total Manpower and Estimated Manpower Availability should be read as Estimated Manpower Available.

MANPOWER NEEDS AND AVAILABILITY

State: Alabama

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	718	725	870	876	882	888	894	900	900	900
Alternative 1 Needs Estimated	3,934	3,978	4,027	4,077	4,131	4,176	4,221	4,267	4,313	4,358
Alternative 2 Needs Estimated	1,276	1,303	1,337	1,379	1,435	1,452	1,472	1,490	1,506	1,524
Estimated Manpower Availability	8,873	9,177	9,500	9,804	10,146	10,469	10,811	11,153	11,495	11,856
Estimated Total Availability (000's)	468	484	500	516	534	551	568	587	606	625
One - to Three-Year College Skill Level										
Estimated Manpower Availability	2,983	3,097	3,211	3,344	3,458	3,591	3,724	3,838	3,971	4,104
Estimated Total Availability (000's)	157	163	169	176	182	189	196	202	209	216
Four-Year College Skill Level										
State Manpower Needs Estimated	278	297	320	327	344	356	368	381	381	381
Alternative 1 Needs Estimated	750	774	801	829	855	893	929	963	1,001	1,041
Alternative 2 Needs Estimated	372	383	396	409	422	437	451	467	484	504
Estimated Manpower Availability	35,305	35,899	36,474	37,068	37,697	38,321	38,950	39,578	40,237	40,900
Estimated Manpower Availability(Teachers)	31,847	32,232	32,617	33,002	33,403	33,818	34,219	34,619	35,050	35,466
Estimated Total Availability (000's)	182	193	203	214	226	237	249	261	273	286

MANPOWER NEEDS AND AVAILABILITY

State: Alaska

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	111	190	208	220	225	233	238	243	251	256
Alternative 1 Needs Estimated	114	116	120	121	125	127	129	131	131	133
Alternative 2 Needs Estimated	45	45	46	47	48	50	50	50	51	51
Estimated Manpower Availability	2, 632	2, 744	2, 800	2, 912	3, 024	3, 136	3, 248	3, 304	3, 472	3, 640
Estimated Total Availability (000's)	47	48	51	52	53	56	58	59	62	64
One- to Three Year College Skill Level										
Estimated Manpower Availability	1, 008	1, 064	1, 064	1, 120	1, 176	1, 176	1, 232	1, 288	1, 344	1, 344
Estimated Total Availability (000's)	18	19	19	20	21	21	22	23	24	24
Four-Year College Skill Level										
State Manpower Needs Estimated	100	102	104	105	107	108	109	109	109	109
Alternative 1 Needs Estimated	83	84	85	86	87	89	92	94	97	99
Alternative 2 Needs Estimated	49	50	51	52	53	54	55	56	59	60
Estimated Manpower Availability	3, 824	3, 948	4, 073	4, 174	4, 298	4, 422	4, 546	4, 670	4, 817	4, 941
Estimated Manpower Availability(Teachers)	2, 928	2, 996	3, 065	3, 110	3, 178	3, 246	3, 314	3, 382	3, 473	3, 541
Estimated Total Availability (000's)	16	17	18	19	20	21	22	23	24	25

MANPOWER NEEDS AND AVAILABILITY

State: Arizona

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	787	794	795	802	808	814	821	828	828	828
Alternative 1 Needs Estimated	706	723	744	765	792	809	827	846	863	882
Alternative 2 Needs Estimated	231	235	241	246	254	257	264	268	273	276
Estimated Manpower Availability	7,280	7, 618	8,164	8, 372	8,762	9,152	9,568	10, 010	10,478	10, 972
Estimated Total Availability (000's)	280	293	314	322	337	352	368	385	403	422
One- to Three-Year College Skill Level										
Estimated Manpower Availability	3,198	3, 354	3, 510	3, 666	3, 822	4, 004	4,186	4, 368	4, 576	4, 758
Estimated Total Availability (000's)	123	129	135	141	147	154	161	168	176	183
Four-Year College Skill Level										
State Manpower Needs Estimated	74	82	88	92	97	101	109	113	114	114
Alternative 1 Needs Estimated	339	353	367	381	395	412	427	445	462	480
Alternative 2 Needs Estimated	172	177	184	189	196	202	211	219	227	236
Estimated Manpower Availability	20,423	21,133	21,887	22, 659	23,431	24,248	25,108	25,961	26,876	27, 895
Estimated Manpower Availability(Teachers)	17,381	17,909	18,455	19, 019	19,583	20,166	20,766	21,385	22,040	22, 695
Estimated Total Availability (000's)	117	124	132	140	148	157	167	176	186	200

MANPOWER NEEDS AND AVAILABILITY

State: Arkansas

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	408	1,266	1,272	1,278	1,284	1,286	1,286	1,286	1,286	1,286
Alternative 1 Needs Estimated	3,866	3,901	3,943	3,973	4,024	4,065	4,101	4,138	4,179	4,216
Alternative 2 Needs Estimated	1,268	1,278	1,288	1,302	1,316	1,329	1,341	1,353	1,367	1,380
Estimated Manpower Availability	5,355	5,544	5,733	5,922	6,132	6,342	6,552	6,762	6,972	7,203
Estimated Total Availability (000's)	255	264	273	282	292	302	312	322	332	343
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,911	1,995	2,058	2,142	2,226	2,289	2,373	2,457	2,541	2,625
Estimated Total Availability (000's)	91	95	98	102	106	109	113	117	121	125
Four-Year College Skill Level										
State Manpower Needs Estimated	3,021	3,023	3,027	3,029	3,031	3,033	3,034	3,034	3,034	3,034
Alternative 1 Needs Estimated	557	570	589	604	624	643	663	683	708	729
Alternative 2 Needs Estimated	292	299	306	315	323	333	342	351	362	374
Estimated Manpower Availability	21,822	22,186	22,550	22,914	23,316	23,697	24,099	24,480	24,882	25,301
Estimated Manpower Availability(Teachers)	19,890	20,128	20,366	20,604	20,859	21,114	21,369	21,624	21,879	22,151
Estimated Total Availability (000's)	92	98	104	110	117	123	130	136	143	150

MANPOWER NEEDS AND AVAILABILITY

State: California

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	5,328	5,737	6,567	6,567	6,567	6,567	6,567	6,567	6,567	6,567
Alternative 1 Needs Estimated	10,684	10,899	11,144	11,344	11,689	11,905	12,045	12,230	12,398	12,593
Alternative 2 Needs Estimated	3,422	3,484	3,560	3,645	3,749	3,797	3,849	3,906	3,960	4,021
Estimated Manpower Availability	72,922	76,038	79,287	82,631	86,146	89,756	93,499	97,375	101,422	105,503
Estimated Total Availability (000's)	3,838	4,002	4,173	4,349	4,534	4,724	4,921	5,125	5,338	5,557
One- to Three-Year College Skill Level										
Estimated Manpower Availability	33,630	34,998	36,423	37,905	39,425	41,002	42,636	44,346	46,094	47,918
Estimated Total Availability (000's)	1,770	1,842	1,917	1,995	2,075	2,158	2,244	2,334	2,426	2,522
Four-Year College Skill Level										
State Manpower Needs Estimated	6,335	6,337	6,337	6,337	6,337	6,337	6,337	6,337	6,337	6,337
Alternative 1 Needs Estimated	3,031	3,172	3,315	3,465	3,629	3,798	3,977	4,166	3,729	3,900
Alternative 2 Needs Estimated	1,464	1,531	1,604	1,678	1,756	1,837	1,924	2,017	2,112	2,214
Estimated Manpower Availability	202,818	209,200	215,804	222,600	229,638	236,864	244,317	252,044	259,936	268,108
Estimated Manpower Availability(Teachers)	173,463	178,135	182,953	187,887	192,968	198,180	203,524	209,028	214,678	220,475
Estimated Total Availability (000's)	1,545	1,635	1,729	1,827	1,930	2,036	2,147	2,264	2,382	2,507

MANPOWER NEEDS AND AVAILABILITY

State: Colorado

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	527	553	643	673	704	735	766	795	795	795
Alternative 1 Needs Estimated	1,235	1,249	1,269	1,285	1,301	1,321	1,338	1,354	1,370	1,389
Alternative 2 Needs Estimated	394	397	404	408	413	419	425	428	434	440
Estimated Manpower Availability	11,730	12,150	12,540	12,990	13,410	13,830	14,280	14,730	15,210	15,690
Estimated Total Availability (000's)	391	405	418	433	447	461	476	491	507	523
One- to Three-Year College Skill Level										
Estimated Manpower Availability	4,980	5,130	5,310	5,460	5,640	5,820	6,000	6,210	6,390	6,600
Estimated Total Availability (000's)	166	171	177	182	188	194	200	207	273	220
Four-Year College Skill Level										
State Manpower Needs Estimated	441	732	1,018	1,019	1,020	1,021	1,022	1,022	1,022	1,022
Alternative 1 Needs Estimated	564	579	589	615	634	654	675	697	720	744
Alternative 2 Needs Estimated	266	293	301	310	318	328	338	348	359	372
Estimated Manpower Availability	27,728	28,358	29,049	29,709	30,388	31,097	31,807	32,535	33,293	34,071
Estimated Manpower Availability(Teachers)	22,748	23,168	23,589	24,009	24,448	24,887	25,327	25,785	26,243	26,721
Estimated Total Availability (000's)	166	173	182	190	198	207	216	225	235	245

MANPOWER NEEDS AND AVAILABILITY

State: Connecticut

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	564	569	658	658	679	679	680	681	681	681
Alternative 1 Needs Estimated	1, 288	1, 331	1, 381	1, 441	1, 518	1, 553	1, 580	1, 613	1, 651	1, 692
Alternative 2 Needs Estimated	411	423	438	455	477	491	497	507	519	530
Estimated Manpower Availability	10, 203	10, 564	10, 925	11, 324	11, 704	12, 103	12, 521	12, 939	13, 376	13, 889
Estimated Total Availability (000's)	537	556	575	596	616	637	659	681	704	731
One- to Three-Year College Skill Level										
Estimated Manpower Availability	3, 591	3, 724	3, 876	4, 009	4, 161	4, 313	4, 465	4, 617	4, 788	4, 883
Estimated Total Availability (000's)	189	196	204	211	219	227	235	243	252	257
Four-Year College Skill Level										
State Manpower Needs Estimated	23	31	31	31	31	31	31	31	31	31
Alternative 1 Needs Estimated	437	439	457	477	497	524	548	573	600	628
Alternative 2 Needs Estimated	210	219	229	239	250	260	271	285	298	312
Estimated Manpower Availability	31, 143	31, 856	32, 569	33, 312	34, 059	34, 835	35, 611	36, 406	37, 216	38, 041
Estimated Manpower Availability(Teachers)	26, 754	27, 239	27, 724	28, 239	28, 739	29, 268	29, 797	30, 326	30, 870	31, 429
Estimated Total Availability (000's)	231	243	255	267	280	293	306	320	334	348

MANPOWER NEEDS AND AVAILABILITY

State: Delaware

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	222	252	252	262	272	282	292	302	312	322
Alternative 1 Needs Estimated	366	374	382	392	401	411	419	427	440	451
Alternative 2 Needs Estimated	124	125	130	132	137	139	142	145	148	152
Estimated Manpower Availability	3, 026	3, 128	3, 264	3, 366	3, 502	3, 638	3, 774	3, 910	4, 046	4, 182
Estimated Total Availability (000's)	89	92	96	99	103	107	111	115	119	123
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1, 020	1, 054	1, 088	1, 156	1, 190	1, 224	1, 292	1, 326	1, 394	1, 462
Estimated Total Availability (000's)	30	31	32	34	35	36	38	39	41	43
Four-Year College Skill Level										
State Manpower Needs Estimated	146	149	153	156	159	162	172	172	173	173
Alternative 1 Needs Estimated	106	112	114	117	122	127	132	136	144	150
Alternative 2 Needs Estimated	60	61	63	65	67	69	72	74	76	79
Estimated Manpower Availability	6, 568	6, 737	6, 906	7, 092	7, 311	7, 497	7, 716	7, 902	8, 138	8, 358
Estimated Manpower Availability(Teachers)	5, 174	5, 275	5, 376	5, 494	5, 611	5, 729	5, 846	5, 964	6, 098	6, 216
Estimated Total Availability (000's)	41	43	45	47	50	52	55	57	60	63

MANPOWER NEEDS AND AVAILABILITY

State: Florida

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,039	1,125	1,203	1,247	1,291	1,344	1,377	1,418	1,457	1,506
Alternative 1 Needs Estimated	4,539	4,618	4,704	4,797	4,896	4,984	5,071	5,166	5,262	5,365
Alternative 2 Needs Estimated	1,463	1,488	1,516	1,545	1,578	1,604	1,631	1,659	1,687	1,717
Estimated Manpower Availability	17,904	18,736	19,600	20,512	21,472	22,448	23,440	24,496	25,600	26,736
Estimated Total Availability (000's)	1,119	1,171	1,225	1,282	1,342	1,403	1,465	1,531	1,600	1,671
One- to Three-Year College Skill Level										
Estimated Manpower Availability	6,976	7,312	7,648	8,000	8,368	8,752	9,168	9,584	10,016	10,464
Estimated Total Availability (000's)	436	457	478	500	523	547	573	599	626	654
Four-Year College Skill Level										
State Manpower Needs Estimated	509	563	615	626	637	648	659	670	680	690
Alternative 1 Needs Estimated	1,003	1,042	1,089	1,133	1,186	1,235	1,288	1,347	1,406	1,470
Alternative 2 Needs Estimated	502	521	541	562	585	613	638	665	693	725
Estimated Manpower Availability	60,796	62,828	64,902	67,064	69,284	71,578	73,944	76,382	72,924	81,524
Estimated Manpower Availability(Teachers)	54,012	55,580	57,190	58,856	60,564	62,314	64,120	65,982	67,900	69,860
Estimated Total Availability (000's)	424	453	482	513	545	579	614	650	689	729

MANPOWER NEEDS AND AVAILABILITY

State: Georgia

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	693	749	805	839	871	903	935	957	979	1, 001
Alternative 1 Needs Estimated	5, 038	5, 100	5, 169	5, 242	5, 323	5, 386	5, 461	5, 520	5, 592	5, 668
Alternative 2 Needs Estimated	1, 608	1, 625	1, 646	1, 668	1, 690	1, 709	1, 729	1, 749	1, 768	1, 789
Estimated Manpower Availability	9, 392	9, 744	10, 112	10, 496	10, 880	11, 280	11, 776	12, 128	12, 544	12, 992
Estimated Total Availability (000's)	587	609	632	656	680	705	736	758	784	812
One - to Three-Year College Skill Level										
Estimated Manpower Availability	3, 664	3, 808	3, 968	4, 112	4, 272	4, 432	4, 624	4, 752	4, 928	5, 104
Estimated Total Availability (000's)	229	238	248	257	267	277	289	297	308	319
Four-Year College Skill Level										
State Manpower Needs Estimated	698	706	711	734	756	778	800	812	824	836
Alternative 1 Needs Estimated	996	1, 020	1, 063	1, 099	1, 139	1, 189	1, 223	1, 267	1, 317	1, 367
Alternative 2 Needs Estimated	532	547	562	579	597	618	640	662	682	708
Estimated Manpower Availability	46, 137	47, 058	47, 974	48, 931	49, 883	50, 868	52, 225	52, 871	53, 920	55, 009
Estimated Manpower Availability(Teachers)	42, 217	42, 898	43, 594	44, 291	44, 987	45, 716	46, 769	47, 191	47, 952	48, 713
Estimated Total Availability (000's)	245	260	274	290	306	322	341	355	373	391

MANPOWER NEEDS AND AVAILABILITY

State: Hawaii

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	61	61	61	61	61	61	61	61	61	61
Alternative 1 Needs Estimated	263	270	278	288	300	307	312	318	326	332
Alternative 2 Needs Estimated	101	102	107	108	113	115	118	119	120	123
Estimated Manpower Availability	8,768	8,960	9,216	9,536	9,792	10,048	10,304	10,624	10,880	11,264
Estimated Total Availability (000's)	137	140	144	149	153	157	161	166	170	176
One- to Three-Year College Skill Level										
Estimated Manpower Availability	2,304	2.432	2.496	2,560	2,688	2,752	2,880	2,944	3,072	3,136
Estimated Total Availability (000's)	36	38	39	40	42	43	45	46	48	49
Four-Year College Skill Level										
State Manpower Needs Estimated	178	194	212	226	240	254	270	286	286	286
Alternative 1 Needs Estimated	139	144	150	155	163	170	177	184	190	200
Alternative 2 Needs Estimated	74	76	79	81	83	88	91	95	98	101
Estimated Manpower Availability	9,762	10,052	10,262	10,488	10,779	11,005	11,296	11,586	11,812	12,119
Estimated Manpower Availability (Teachers)	6,626	6,724	6,806	6,904	7,003	7,101	7,200	7,298	7,396	7,511
Estimated Total Availability (000's)	49	52	54	56	59	61	64	67	69	72

MANPOWER NEEDS AND AVAILABILITY

State: Idaho

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	157	217	277	278	279	280	280	280	280	280
Alternative 1 Needs Estimated	740	751	764	785	803	816	823	830	842	852
Alternative 2 Needs Estimated	227	229	233	238	243	247	252	253	256	257
Estimated Manpower Availability	3,724	3,808	3,920	4,004	4,088	4,200	4,284	4,396	4,480	4,592
Estimated Total Availability (000's)	133	136	140	143	146	150	153	157	160	164
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,568	1,624	1,652	1,680	1,736	1,764	1,820	1,848	1,904	1,932
Estimated Total Availability (000's)	56	58	59	60	62	63	65	66	68	69
Four-Year College Skill Level										
State Manpower Needs Estimated	11	12	13	14	14	15	15	15	15	15
Alternative 1 Needs Estimated	310	315	324	330	337	346	355	364	373	384
Alternative 2 Needs Estimated	159	162	164	168	170	174	178	182	190	194
Estimated Manpower Availability	8,843	8,918	9,107	9,220	9,380	9,512	9,644	9,776	9,908	10,068
Estimated Manpower Availability(Teachers)	7,695	7,714	7,847	7,904	7,980	8,056	8,132	8,208	8,284	8,360
Estimated Total Availability (000's)	41	43	45	47	50	52	54	56	58	61

MANPOWER NEEDS AND AVAILABILITY

State: Illinois

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1, 838	2, 190	2, 433	2, 514	2, 587	2, 659	2, 720	2, 800	2, 800	2, 800
Alternative 1 Needs Estimated	6, 694	6, 807	6, 928	7, 068	7, 220	7, 336	7, 452	7, 580	7, 708	7, 842
Alternative 2 Needs Estimated	2, 113	2, 144	2, 179	2, 219	2, 264	2, 296	2, 328	2, 364	2, 400	2, 436
Estimated Manpower Availability	30, 144	31, 152	31, 872	32, 784	33, 680	34, 624	35, 552	36, 528	37, 504	38, 496
Estimated Total Availability (000's)	1, 884	1, 947	1, 992	2, 049	2, 105	2, 164	2, 222	2, 283	2, 344	2, 406
One- to Three-Year College Skill Level										
Estimated Manpower Availability	10, 752	11, 088	11, 424	11, 760	12, 112	12, 464	12, 832	13, 200	13, 568	13, 952
Estimated Total Availability (000's)	672	693	714	735	757	779	802	825	848	872
Four-Year College Skill Level										
State Manpower Needs Estimated	2, 225	2, 234	2, 260	2, 270	2, 278	2, 285	2, 290	2, 297	2, 297	2, 297
Alternative 1 Needs Estimated	1, 716	1, 785	1, 861	1, 937	2, 030	2, 109	2, 199	2, 299	2, 403	2, 511
Alternative 2 Needs Estimated	853	883	920	958	998	1, 039	1, 081	1, 129	1, 179	1, 231
Estimated Manpower Availability	107, 242	108, 837	110, 463	112, 104	113, 791	115, 492	117, 194	118, 957	120, 719	122, 513
Estimated Manpower Availability(Teachers)	96, 170	97, 221	98, 287	99, 368	100, 463	101, 572	102, 682	103, 821	104, 959	106, 113
Estimated Total Availability (000's)	692	726	761	796	833	870	907	946	985	1, 025

MANPOWER NEEDS AND AVAILABILITY

State: Indiana

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	261	278	282	293	304	315	326	337	337	337
Alternative 1 Needs Estimated	4,829	4,903	4,984	5,076	5,182	5,249	5,317	5,391	5,435	5,539
Alternative 2 Needs Estimated	1,566	1,587	1,609	1,637	1,666	1,687	1,707	1,727	1,753	1,779
Estimated Manpower Availability	20,034	20,559	21,084	21,609	22,155	22,701	23,247	23,835	24,402	24,906
Estimated Total Availability (000's)	1,954	979	1,004	1,029	1,055	1,081	1,107	1,135	1,162	1,186
One - to Three-Year College Skill Level										
Estimated Manpower Availability	5,607	5,796	5,985	6,174	6,363	6,552	6,762	6,951	7,161	7,371
Estimated Total Availability (000's)	267	276	285	294	303	312	322	331	341	351
Four-Year College Skill Level										
State Manpower Needs Estimated	161	163	164	164	164	164	164	165	165	165
Alternative 1 Needs Estimated	1,028	1,069	1,108	1,151	1,194	1,245	1,293	1,347	1,401	1,462
Alternative 2 Needs Estimated	524	541	560	580	600	634	659	684	708	739
Estimated Manpower Availability	54,005	54,806	55,607	56,429	57,247	58,069	58,907	59,782	60,637	61,533
Estimated Manpower Availability(Teachers)	48,146	48,632	49,118	49,604	50,107	50,593	51,095	51,613	52,132	52,650
Estimated Total Availability (000's)										

MANPOWER NEEDS AND AVAILABILITY

State: Iowa

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	465	563	572	612	652	692	732	772	772	772
Alternative 1 Needs Estimated	5, 393	5, 446	5, 503	5, 582	5, 621	5, 673	5, 714	5, 767	5, 819	5, 876
Alternative 2 Needs Estimated	1, 760	1, 776	1, 792	1, 811	1, 815	1, 849	1, 864	1, 879	1, 893	1, 912
Estimated Manpower Availability	11, 991	12, 180	12, 390	12, 600	12, 789	12, 999	13, 209	13, 398	13, 608	13, 818
Estimated Total Availability (000's)	571	580	590	600	609	619	629	638	648	658
One - to Three-Year College Skill Level										
Estimated Manpower Availability	3, 906	3, 990	4, 074	4, 158	4, 221	4, 305	4, 389	4, 473	4, 557	4, 620
Estimated Total Availability (000's)	186	190	194	198	201	205	209	213	217	220
Four-Year College Skill Level										
State Manpower Needs Estimated	903	920	962	965	983	1, 001	1, 019	1, 039	1, 039	1, 039
Alternative 1 Needs Estimated	819	842	864	888	918	944	974	1, 006	1, 038	1, 118
Alternative 2 Needs Estimated	415	445	458	471	484	498	514	528	547	567
Estimated Manpower Availability	34, 144	34, 365	34, 568	34, 789	35, 010	35, 212	35, 415	35, 636	35, 859	36, 279
Estimated Manpower Availability(Teachers)	30, 784	30, 858	30, 914	30, 988	31, 062	31, 117	31, 173	31, 247	31, 302	31, 575
Estimated Total Availability (000's)	160	167	174	181	188	195	202	209	217	224

MANPOWER NEEDS AND AVAILABILITY

State: Kansas

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	287	327	359	384	399	424	449	484	509	534
Alternative 1 Needs Estimated	1,917	1,941	1,968	1,999	2,035	2,056	2,077	2,101	2,092	2,116
Alternative 2 Needs Estimated	600	605	614	622	631	639	644	651	658	665
Estimated Manpower Availability	12,258	12,501	12,771	13,041	13,311	13,501	13,851	14,121	14,391	14,691
Estimated Total Availability (000's)	454	463	473	483	493	503	513	523	533	544
One- to Three-Year College Skill Level										
Estimated Manpower Availability	4,536	4,644	4,752	4,860	4,941	5,049	5,157	5,265	5,373	5,481
Estimated Total Availability (000's)	168	172	176	180	183	187	191	195	199	203
Four-Year College Skill Level										
State Manpower Needs Estimated	1,098	1,094	1,101	1,101	1,101	1,101	1,101	1,101	1,101	1,101
Alternative 1 Needs Estimated	778	796	815	836	856	877	902	926	951	979
Alternative 2 Needs Estimated	403	406	421	426	441	452	463	476	491	505
Estimated Manpower Availability	30,158	30,472	30,786	31,146	31,487	31,801	32,161	32,502	32,841	33,203
Estimated Manpower Availability(Teachers)	25,973	26,125	26,277	26,448	26,600	26,752	26,923	27,075	27,227	27,398
Estimated Total Availability (000's)										

MANPOWER NEEDS AND AVAILABILITY

State: Kentucky

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	594	597	604	606	608	610	612	615	615	615
Alternative 1 Needs Estimated	3, 659	3, 701	3, 747	3, 794	3, 847	3, 887	3, 935	3, 979	4, 022	4, 069
Alternative 2 Needs Estimated	1, 173	1, 184	1, 197	1, 211	1, 221	1, 243	1, 255	1, 266	1, 282	1, 294
Estimated Manpower Availability	8, 253	8, 505	8, 778	9, 030	9, 303	9, 576	9, 849	10, 143	10, 416	10, 710
Estimated Total Availability (000's)	393	405	418	430	443	456	469	483	496	510
One - to Three-Year College Skill Level										
Estimated Manpower Availability	3, 087	3, 192	3, 297	3, 402	3, 507	3, 633	3, 738	3, 843	3, 948	4, 074
Estimated Total Availability (000's)	147	152	157	162	167	173	178	183	188	194
Four-Year College Skill Level										
State Manpower Needs Estimated	4	4	4	4	4	4	4	4	4	4
Alternative 1 Needs Estimated	706	726	749	773	798	822	851	882	912	946
Alternative 2 Needs Estimated	386	401	405	416	427	442	455	468	484	500
Estimated Manpower Availability	30, 065	30, 436	30, 821	31, 248	31, 577	31, 962	32, 354	32, 753	33, 156	33, 565
Estimated Manpower Availability(Teachers)	26, 810	26, 992	27, 188	27, 384	27, 566	27, 762	27, 944	28, 154	28, 350	28, 546
Estimated Total Availability (000's)	155	164	173	184	191	200	210	219	229	239

MANPOWER NEEDS AND AVAILABILITY

State: Louisiana

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,264	1,265	1,266	1,267	1,268	1,269	1,270	1,271	1,271	1,271
Alternative 1 Needs Estimated	2,812	2,859	2,910	2,968	3,001	3,081	3,136	3,193	3,254	3,321
Alternative 2 Needs Estimated	904	916	930	946	965	980	994	1,010	1,030	1,046
Estimated Manpower Availability	14,100	14,640	15,180	15,750	16,350	16,920	17,550	18,180	18,810	19,470
Estimated Total Availability (000's)	470	488	506	525	545	564	585	606	627	649
One- to Three-Year College Skill Level										
Estimated Manpower Availability	5,100	5,310	5,520	5,760	5,970	6,210	6,450	6,690	6,930	7,170
Estimated Total Availability (000's)	170	177	184	192	199	207	215	223	231	239
Four-Year College Skill Level										
State Manpower Needs Estimated	17	17	17	17	17	17	17	17	17	17
Alternative 1 Needs Estimated	654	679	713	738	768	803	837	872	911	954
Alternative 2 Needs Estimated	275	346	360	373	380	403	419	436	458	476
Estimated Manpower Availability	40,153	41,061	41,969	42,893	43,864	44,955	45,823	46,810	47,845	48,909
Estimated Manpower Availability(Teachers)	34,063	34,611	35,153	35,723	36,304	36,885	37,483	38,080	38,695	39,309
Estimated Total Availability (000's)	203	215	227	239	252	269	278	291	305	320

MANPOWER NEEDS AND AVAILABILITY

State: Maine

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	57	61	107	113	117	121	125	130	130	130
Alternative 1 Needs Estimated	1,086	1,105	1,105	1,117	1,129	1,141	1,150	1,161	1,169	1,179
Alternative 2 Needs Estimated	358	360	364	366	369	372	374	376	380	384
Estimated Manpower Availability	4,728	4,824	4,896	4,992	5,088	5,184	5,256	5,376	5,448	5,544
Estimated Total Availability (000's)	197	201	204	208	212	216	219	224	227	231
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,440	1,488	1,512	1,560	1,584	1,632	1,656	1,704	1,728	1,776
Estimated Total Availability (000's)	60	62	63	65	66	68	69	71	72	74
Four-Year College Skill Level										
State Manpower Needs Estimated	218	244	309	325	347	368	389	402	402	402
Alternative 1 Needs Estimated	220	226	233	240	247	258	266	275	287	296
Alternative 2 Needs Estimated	117	120	123	127	130	134	138	142	150	155
Estimated Manpower Availability	12,117	12,244	12,329	12,438	12,541	12,650	12,758	12,862	12,970	13,079
Estimated Manpower Availability(Teachers)	10,893	10,948	10,985	11,022	11,077	11,114	11,150	11,206	11,242	11,279
Estimated Total Availability (000's)	51	54	56	59	61	64	67	69	72	75

MANPOWER NEEDS AND AVAILABILITY

State: Maryland

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,318	1,469	1,556	1,652	1,754	1,847	1,944	2,049	2,049	2,049
Alternative 1 Needs Estimated	1,642	1,668	1,700	1,732	1,760	1,789	1,818	1,846	1,879	1,907
Alternative 2 Needs Estimated	531	538	547	557	565	573	581	587	597	606
Estimated Manpower Availability	10,494	10,908	11,340	11,790	12,258	12,726	13,230	13,734	14,238	14,778
Estimated Total Availability (000's)	583	606	630	655	681	707	735	763	791	821
One- to Three-Year College Skill Level										
Estimated Manpower Availability	3,726	3,888	4,050	4,230	4,392	4,572	4,770	4,950	5,148	5,346
Estimated Total Availability (000's)	207	216	225	235	244	254	265	275	286	297
Four-Year College Skill Level										
State Manpower Needs Estimated	1,208	1,430	1,731	1,781	1,830	1,878	1,926	1,979	1,979	1,979
Alternative 1 Needs Estimated	555	578	602	618	643	687	716	729	763	820
Alternative 2 Needs Estimated	278	286	301	313	326	336	356	371	388	405
Estimated Manpower Availability	39,806	40,794	41,816	42,872	43,944	45,034	46,172	47,312	48,484	49,690
Estimated Manpower Availability(Teachers)	34,928	35,664	36,416	37,184	37,968	38,752	39,584	40,400	41,248	42,112
Estimated Total Availability (000's)	271	285	300	316	332	349	366	384	402	421

MANPOWER NEEDS AND AVAILABILITY

State: Massachusetts

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	529	532	532	532	532	532	532	532	532	532
Alternative 1 Needs Estimated	1,940	1,972	2,007	2,046	2,092	2,122	2,152	2,171	2,210	2,234
Alternative 2 Needs Estimated	619	628	639	645	664	673	681	693	702	712
Estimated Manpower Availability	16,545	16,950	17,355	17,775	18,195	18,615	19,050	19,500	19,935	20,400
Estimated Total Availability (000's)	1,103	1,130	1,157	1,185	1,213	1,241	1,270	1,300	1,329	1,360
One- to Three-Year College Skill Level										
Estimated Manpower Availability	5,490	5,655	5,805	5,955	6,120	6,270	6,435	6,600	6,780	6,945
Estimated Total Availability (000's)	366	377	387	397	408	418	429	440	452	463
Four-Year College Skill Level										
State Manpower Needs Estimated	5	5	5	5	5	5	5	5	5	5
Alternative 1 Needs Estimated	762	804	830	868	908	950	1,000	1,037	1,088	1,139
Alternative 2 Needs Estimated	377	393	411	426	448	467	491	514	536	561
Estimated Manpower Availability	53,113	53,817	54,492	55,196	55,900	56,604	57,337	58,070	58,803	59,565
Estimated Manpower Availability(Teachers)	47,068	47,502	47,922	48,356	48,790	49,224	49,672	50,120	50,568	51,030
Estimated Total Availability (000's)	403	421	438	456	474	492	511	530	549	569

MANPOWER NEEDS AND AVAILABILITY

State: Michigan

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,700	1,900	2,100	2,225	2,340	2,455	2,570	2,572	2,572	2,572
Alternative 1 Needs Estimated	6,503	6,572	6,652	6,739	6,845	6,893	6,963	7,022	7,084	7,146
Alternative 2 Needs Estimated	2,012	2,023	2,057	2,085	2,114	2,121	2,154	2,171	2,190	2,211
Estimated Manpower Availability	29,960	30,800	31,640	32,500	33,380	34,280	35,200	36,120	37,060	38,020
Estimated Total Availability (000's)	1,498	1,540	1,582	1,625	1,669	1,714	1,760	1,806	1,853	1,901
One - to Three-Year College Skill Level										
Estimated Manpower Availability	9,580	9,900	10,200	10,520	10,860	11,180	11,520	11,860	12,220	12,560
Estimated Total Availability (000's)	475	495	510	526	543	559	576	593	611	628
Four-Year College Skill Level										
State Manpower Needs Estimated	76	76	76	76	76	76	76	76	76	76
Alternative 1 Needs Estimated	1,483	1,591	1,650	1,716	1,779	1,853	1,930	2,010	2,093	2,182
Alternative 2 Needs Estimated	763	790	812	838	868	904	939	974	1,015	1,050
Estimated Manpower Availability	87,771	89,149	90,542	91,956	93,305	94,850	96,315	97,815	99,316	100,852
Estimated Manpower Availability(Teachers)	77,891	78,749	79,622	80,496	81,385	82,290	83,195	84,115	85,036	85,972
Estimated Total Availability (000's)	494	520	546	573	600	628	656	685	714	744

MANPOWER NEEDS AND AVAILABILITY

State: Minnesota

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	643	693	763	817	872	927	982	1, 032	1, 032	1, 032
Alternative 1 Needs Estimated	5, 926	6, 170	6, 236	6, 312	6, 396	6, 455	6, 512	6, 571	6, 630	6, 691
Alternative 2 Needs Estimated	2, 003	2, 023	2, 042	2, 069	2, 093	2, 112	2, 130	2, 149	2, 151	2, 187
Estimated Manpower Availability	12, 680	13, 000	13, 340	13, 680	14, 020	14, 360	14, 720	15, 080	15, 440	15, 800
Estimated Total Availability (000's)	634	650	667	684	701	718	736	754	772	790
One - to Three-Year College Skill Level										
Estimated Manpower Availability	5, 080	5, 200	5, 340	5, 480	5, 600	5, 740	5, 880	6, 040	6, 188	6, 320
Estimated Total Availability (000's)	254	260	267	274	280	287	294	302	309	316
Four-Year College Skill Level										
State Manpower Needs Estimated	1, 308	1, 311	1, 320	1, 321	1, 322	1, 323	1, 324	1, 329	1, 329	1, 329
Alternative 1 Needs Estimated	1, 055	1, 089	1, 124	1, 160	1, 202	1, 243	1, 288	1, 334	1, 384	1, 435
Alternative 2 Needs Estimated	498	512	527	545	565	581	602	624	646	668
Estimated Manpower Availability	41, 880	42, 436	42, 973	43, 547	44, 103	44, 677	45, 271	45, 865	46, 439	47, 032
Estimated Manpower Availability(Teachers)	37, 400	37, 736	38, 073	38, 427	38, 763	39, 117	39, 471	39, 825	40, 179	40, 532
Estimated Total Availability (000's)	224	235	245	256	267	278	290	302	313	325

MANPOWER NEEDS AND AVAILABILITY

State: Mississippi

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	-	-	-	-	-	-	-	-	-	-
Alternative 1 Needs Estimated	3,393	3,420	3,458	3,492	3,526	3,559	3,592	3,625	3,656	3,691
Alternative 2 Needs Estimated	1,049	1,058	1,067	1,076	1,086	1,097	1,106	1,115	1,126	1,135
Estimated Manpower Availability	6,028	6,226	6,446	6,644	6,864	7,084	7,304	7,524	7,766	7,986
Estimated Total Availability (000's	274	283	293	302	312	322	332	342	353	363
One - to Three-Year College Skill Level										
Estimated Manpower Availability	2,398	2,464	2,552	2,640	2,728	2,816	2,904	2,992	3,080	3,168
Estimated Total Availability (000's)	109	112	116	120	124	128	132	136	140	144
Four-Year College Skill Level										
State Manpower Needs Estimated	1	1	1	1	1	1	1	1	1	1
Alternative 1 Needs Estimated	562	581	599	616	696	655	675	700	721	750
Alternative 2 Needs Estimated	295	302	309	318	327	337	348	359	371	382
Estimated Manpower Availability	23,653	24,020	24,365	24,732	25,078	25,461	25,485	26,212	26,596	27,001
Estimated Manpower Availability(Teachers)	21,189	21,402	21,615	21,828	22,042	22,271	22,501	22,714	22,944	23,173
Estimated Total Availability (000's)	112	119	125	132	138	145	152	159	166	174

MANPOWER NEEDS AND AVAILABILITY

State: Missouri

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	737	776	776	776	776	776	776	776	776	776
Alternative 1 Needs Estimated	5,776	5,849	5,929	6,014	6,109	6,186	6,263	6,344	6,477	6,568
Alternative 2 Needs Estimated	1,871	1,891	1,915	1,943	1,969	1,995	2,018	2,040	2,065	2,079
Estimated Manpower Availability	13,320	13,680	14,040	14,418	14,796	15,174	15,552	15,948	16,344	16,740
Estimated Total Availability (000's)	740	760	780	801	822	843	864	886	908	930
One- to Three-Year College Skill Level										
Estimated Manpower Availability	4,680	4,806	4,950	5,094	5,238	5,382	5,544	5,688	5,832	5,994
Estimated Total Availability (000's)	260	267	275	283	291	299	308	316	324	333
Four-Year College Skill Level										
State Manpower Needs Estimated	88	90	92	92	93	94	95	96	96	96
Alternative 1 Needs Estimated	984	1,006	1,055	1,091	1,128	1,168	1,213	1,258	1,306	1,357
Alternative 2 Needs Estimated	510	526	543	563	581	599	621	640	668	692
Estimated Manpower Availability	43,557	44,097	44,650	45,208	45,780	46,351	46,941	47,527	48,130	48,720
Estimated Manpower Availability(Teachers)	38,823	39,129	39,448	39,754	40,074	40,393	40,713	41,047	41,380	41,700
Estimated Total Availability (000's)	263	276	289	303	317	331	346	360	375	390

MANPOWER NEEDS AND AVAILABILITY

State: Montana

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	226	262	262	262	262	262	262	262	262	262
Alternative 1 Needs Estimated	966	974	987	1,000	1,037	1,047	1,055	1,066	1,073	1,081
Alternative 2 Needs Estimated	314	316	320	321	326	328	334	335	339	342
Estimated Manpower Availability	4,224	4,320	4,416	4,512	4,640	4,736	4,832	4,928	5,056	5,152
Estimated Total Availability (000's)	132	135	138	141	145	148	151	154	158	161
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,792	1,824	1,888	1,920	1,952	1,984	2,048	2,080	2,144	2,176
Estimated Total Availability (000's)	56	57	59	60	61	62	64	65	67	68
Four-Year College Skill Level										
State Manpower Needs Estimated	218	218	224	224	224	224	224	224	224	224
Alternative 1 Needs Estimated	360	365	374	381	391	398	406	414	424	433
Alternative 2 Needs Estimated	192	195	197	200	204	208	211	214	217	221
Estimated Manpower Availability	9,423	9,545	9,687	9,810	9,952	10,074	10,197	10,371	10,493	10,635
Estimated Manpower Availability(Teachers)	8,015	8,073	8,151	8,210	8,288	8,346	8,405	8,483	8,541	8,619
Estimated Total Availability (000's)	44	46	48	50	52	54	56	59	61	63

MANPOWER NEEDS AND AVAILABILITY

State: Nebraska

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	361	423	456	479	522	554	581	582	582	582
Alternative 1 Needs Estimated	1,350	1,413	1,434	1,453	1,475	1,490	1,504	1,520	1,534	1,549
Alternative 2 Needs Estimated	449	453	459	464	472	474	483	486	491	496
Estimated Manpower Availability	6,877	7,015	7,153	7,291	7,429	7,567	7,728	7,866	8,004	8,165
Estimated Total Availability (000's)	299	305	311	317	323	329	336	342	348	355
One- to Three-Year College Skill Level										
Estimated Manpower Availability	2,461	2,507	2,553	2,599	2,668	2,714	2,783	2,829	2,875	2,944
Estimated Total Availability (000's)	107	109	111	113	116	118	121	123	125	128
Four-Year College Skill Level										
State Manpower Needs Estimated	14	24	49	51	53	55	56	57	57	57
Alternative 1 Needs Estimated	601	613	628	641	655	671	687	704	725	744
Alternative 2 Needs Estimated	328	333	339	345	352	358	367	373	381	389
Estimated Manpower Availability	17,977	18,142	18,307	18,491	18,656	18,840	19,046	19,211	19,395	19,578
Estimated Manpower Availability(Teachers)	15,976	16,049	16,122	16,214	16,287	16,379	16,470	16,543	16,435	16,726
Estimated Total Availability (000's)	87	91	95	99	103	107	112	116	120	124

MANPOWER NEEDS AND AVAILABILITY

State: Nevada

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	96	118	140	162	184	206	218	225	225	225
Alternative 1 Needs Estimated	592	600	613	628	642	653	665	666	677	688
Alternative 2 Needs Estimated	212	214	217	220	225	228	233	236	236	245
Estimated Manpower Availability	2, 323	2, 438	2, 576	2, 691	2, 852	2, 990	3, 151	3, 312	3, 473	3, 657
Estimated Total Availability (000's)	101	106	112	117	124	130	137	144	151	159
One - to Three-Year College Skill Level										
Estimated Manpower Availability	966	1, 012	1, 058	1, 104	1, 173	1, 219	1, 288	1, 357	1, 426	1, 495
Estimated Total Availability (000's)	42	44	46	48	51	53	56	59	62	65
Four-Year College Skill Level										
State Manpower Needs Estimated	24	39	54	68	84	94	104	109	109	109
Alternative 1 Needs Estimated	204	206	215	220	224	228	235	239	247	253
Alternative 2 Needs Estimated	97	98	99	102	104	106	109	111	116	120
Estimated Manpower Availability	5, 558	5, 792	6, 049	6, 284	6, 575	6, 849	7, 140	7, 506	7, 763	8, 112
Estimated Manpower Availability(Teachers)	4, 822	5, 010	5, 198	5, 387	5, 609	5, 814	6, 036	6, 310	6, 498	6, 755
Estimated Total Availability (000's)	32	34	37	39	42	45	48	52	55	59

MANPOWER NEEDS AND AVAILABILITY

State: New Hampshire

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	197	228	252	289	320	351	402	455	488	488
Alternative 1 Needs Estimated	744	751	757	765	776	781	787	794	800	808
Alternative 2 Needs Estimated	246	247	251	252	255	256	256	257	260	261
Estimated Manpower Availability	3,168	3,288	3,384	3,504	3,624	3,744	3,840	3,984	4,104	4,224
Estimated Total Availability (000's)	132	137	141	146	151	156	160	166	171	176
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,032	1,080	1,128	1,152	1,200	1,248	1,272	1,320	1,368	1,416
Estimated Total Availability (000's)	43	45	47	48	50	52	53	55	57	59
Four-Year College Skill Level										
State Manpower Needs Estimated	12	17	17	17	17	17	17	18	18	18
Alternative 1 Needs Estimated	151	155	158	165	167	172	178	185	191	197
Alternative 2 Needs Estimated	83	85	86	88	90	93	96	98	101	104
Estimated Manpower Availability	7,119	7,306	7,454	7,626	7,788	7,975	8,147	8,333	8,534	8,720
Estimated Manpower Availability(Teachers)	6,063	6,178	6,278	6,378	6,492	6,607	6,707	6,821	6,950	7,064
Estimated Total Availability (000's)	44	47	49	52	54	57	60	63	66	69

MANPOWER NEEDS AND AVAILABILITY

State: New Jersey

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,948	1,948	1,948	1,948	1,948	1,948	1,948	1,948	1,948	1,948
Alternative 1 Needs Estimated	3,293	3,464	3,572	3,686	3,811	3,923	4,014	4,149	4,263	4,388
Alternative 2 Needs Estimated	1,058	1,088	1,118	1,152	1,188	1,220	1,254	1,287	1,325	1,360
Estimated Manpower Availability	13,850	14,322	14,839	15,378	15,939	16,500	17,094	17,688	18,315	18,942
Estimated Total Availability (000's)	1,255	1,302	1,349	1,398	1,449	1,500	1,554	1,608	1,665	1,722
One- to Three-Year College Skill Level										
Estimated Manpower Availability	4,455	4,642	4,829	5,027	5,225	5,434	5,643	5,863	6,083	6,314
Estimated Total Availability (000's)	405	422	439	457	475	494	513	533	553	574
Four-Year College Skill Level										
State Manpower Needs Estimated	511	511	511	511	511	511	511	511	511	511
Alternative 1 Needs Estimated	954	997	1,042	1,093	1,145	1,199	1,256	1,317	1,379	1,452
Alternative 2 Needs Estimated	475	496	518	541	567	593	621	650	681	713
Estimated Manpower Availability	65,970	67,428	68,901	70,423	71,972	73,546	75,158	76,820	78,432	80,223
Estimated Manpower Availability(Teachers)	60,349	61,499	62,664	63,856	65,075	66,308	67,568	68,856	70,171	71,500
Estimated Total Availability (000's)	511	539	567	597	627	658	690	724	751	793

MANPOWER NEEDS AND AVAILABILITY

State: New Mexico

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	280	328	348	371	383	404	426	457	457	457
Alternative 1 Needs Estimated	904	915	929	945	962	975	994	1, 001	1, 012	1, 026
Alternative 2 Needs Estimated	299	302	306	311	316	319	325	329	331	336
Estimated Manpower Availability	6, 004	6, 232	6, 460	6, 650	6, 878	7, 144	7, 372	7, 638	7, 904	8, 132
Estimated Total Availability (000's)	158	164	170	175	181	188	194	201	208	214
One- to Three-Year College Skill Level										
Estimated Manpower Availability	2, 584	2, 660	2, 774	2, 850	2, 926	3, 040	3, 154	3, 230	3, 344	3, 458
Estimated Total Availability (000's)	68	70	73	75	77	80	83	85	88	91
Four-Year College Skill Level										
State Manpower Needs Estimated	14	18	19	19	19	19	19	21	21	21
Alternative 1 Needs Estimated	259	367	377	386	396	407	418	433	444	457
Alternative 2 Needs Estimated	174	177	181	187	192	197	203	209	212	218
Estimated Manpower Availability	14, 710	15, 020	15, 412	15, 744	16, 114	16, 506	16, 897	17, 289	17, 719	18, 111
Estimated Manpower Availability(Teachers)	12, 012	12, 208	12, 448	12, 666	12, 884	13, 124	13, 363	13, 603	13, 843	14, 083
Estimated Total Availability (000's)	71	74	78	81	85	89	93	97	102	106

MANPOWER NEEDS AND AVAILABILITY

State: New York

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	76	76	76	76	76	76	76	76	76	76
Alternative 1 Needs Estimated	6,786	6,882	7,007	7,132	7,272	7,372	7,478	7,588	7,668	7,815
Alternative 2 Needs Estimated	2,173	2,203	2,237	2,273	2,314	2,344	2,376	2,407	2,441	2,474
Estimated Manpower Availability	45,822	47,208	48,608	50,050	51,506	52,990	54,502	56,042	57,624	59,220
Estimated Total Availability (000's)	3,273	3,372	3,472	3,575	3,679	3,785	3,893	4,003	4,116	4,230
One- to Three-Year College Skill Level										
Estimated Manpower Availability	15,064	15,568	16,086	16,618	17,164	17,724	18,284	18,858	19,446	20,048
Estimated Total Availability (000's)	1,076	1,112	1,149	1,187	1,226	1,266	1,306	1,347	1,389	1,432
Four-Year College Skill Level										
State Manpower Needs Estimated	88	94	95	95	95	95	95	95	95	95
Alternative 1 Needs Estimated	2,326	2,419	2,535	2,651	2,771	2,899	3,037	3,179	3,329	3,491
Alternative 2 Needs Estimated	1,142	1,190	1,243	1,299	1,358	1,419	1,483	1,552	1,624	1,700
Estimated Manpower Availability	184,296	187,166	190,078	193,060	196,056	199,108	202,188	205,327	208,516	211,750
Estimated Manpower Availability(Teachers)	163,674	165,634	167,622	169,638	171,682	173,740	175,812	177,929	180,068	182,224
Estimated Total Availability (000's)	1,473	1,538	1,604	1,673	1,741	1,812	1,884	1,957	2,032	2,109

MANPOWER NEEDS AND AVAILABILITY

State: North Carolina

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,292	1,478	1,611	1,742	1,865	1,992	2,118	2,246	2,246	2,246
Alternative 1 Needs Estimated	4,628	4,695	4,771	4,849	4,933	5,010	5,088	5,167	5,251	5,338
Alternative 2 Needs Estimated	1,493	1,513	1,533	1,559	1,582	1,605	1,623	1,649	1,670	1,695
Estimated Manpower Availability	13,480	13,940	14,440	14,920	15,440	15,940	16,480	17,020	17,560	18,120
Estimated Total Availability (000's)	634	697	722	746	772	797	824	851	878	906
One- to Three-Year College Skill Level										
Estimated Manpower Availability	5,080	5,260	5,460	5,660	5,860	6,060	6,260	6,460	6,680	6,900
Estimated Total Availability (000's)	254	263	273	283	293	303	313	323	334	345
Four-Year College Skill Level										
State Manpower Needs Estimated	3,125	3,393	3,429	3,453	3,470	3,489	3,508	3,521	3,521	3,521
Alternative 1 Needs Estimated	1,032	1,071	1,114	1,158	1,205	1,237	1,310	1,367	1,396	1,489
Alternative 2 Needs Estimated	515	534	553	575	597	621	646	673	701	731
Estimated Manpower Availability	54,022	54,945	55,921	56,901	57,877	58,873	59,905	60,938	61,986	63,052
Estimated Manpower Availability(Teachers)	48,462	49,085	49,741	50,381	51,037	51,693	52,365	53,038	53,726	54,432
Estimated Total Availability (000's)	278	293	309	326	342	359	377	395	413	431

MANPOWER NEEDS AND AVAILABILITY

State: North Dakota

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	99	121	142	142	142	142	142	142	142	142
Alternative 1 Needs Estimated	1,267	1,276	1,290	1,304	1,321	1,330	1,341	1,353	1,365	1,377
Alternative 2 Needs Estimated	421	423	428	431	435	441	443	444	449	454
Estimated Manpower Availability	3,200	3,264	3,360	3,424	3,488	3,584	3,648	3,744	3,808	3,904
Estimated Total Availability (000's)	100	102	105	107	109	112	114	117	119	122
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,600	1,632	1,664	1,696	1,728	1,760	1,792	1,824	1,856	1,888
Estimated Total Availability (000's)	50	51	52	53	54	55	56	57	58	59
Four-Year College Skill Level										
State Manpower Needs Estimated	95	101	110	115	120	125	130	136	136	136
Alternative 1 Needs Estimated	348	436	441	451	457	466	475	482	494	503
Alternative 2 Needs Estimated	210	212	215	222	225	227	230	235	240	244
Estimated Manpower Availability	8,756	8,860	8,964	9,068	9,120	9,224	9,328	9,412	9,484	9,588
Estimated Manpower Availability(Teachers)	7,700	7,740	7,780	7,820	7,840	7,880	7,920	7,940	7,980	8,020
Estimated Total Availability (000's)	33	35	37	39	40	42	44	46	47	49

MANPOWER NEEDS AND AVAILABILITY

State: Ohio

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,150	1,216	1,300	1,329	1,359	1,389	1,419	1,549	1,549	1,549
Alternative 1 Needs Estimated	6,441	6,561	6,700	6,850	7,023	7,145	7,281	7,419	7,562	7,710
Alternative 2 Needs Estimated	2,054	2,087	2,122	2,171	2,218	2,252	2,290	2,325	2,364	2,401
Estimated Manpower Availability	25,690	26,390	27,104	27,818	28,560	29,302	30,072	30,828	31,626	32,424
Estimated Total Availability (000's)	1,835	1,885	1,936	1,987	2,040	2,093	2,148	2,202	2,259	2,316
One- to Three-Year College Skill Level										
Estimated Manpower Availability	7,714	7,566	8,218	8,484	8,750	9,016	9,296	9,646	9,856	10,150
Estimated Total Availability (000's)	551	569	587	606	625	644	664	689	704	725
Four-Year College Skill Level										
State Manpower Needs Estimated	106	147	179	179	180	180	180	181	181	181
Alternative 1 Needs Estimated	1,803	1,884	1,967	2,055	2,146	2,247	2,355	2,464	2,581	2,705
Alternative 2 Needs Estimated	887	923	965	1,007	1,052	1,099	1,147	1,200	1,257	1,315
Estimated Manpower Availability	102,096	103,540	105,030	106,534	108,054	109,574	111,138	112,688	114,116	115,742
Estimated Manpower Availability(Teachers)	93,808	94,832	95,888	96,944	98,016	99,088	100,176	101,264	102,384	103,520
Estimated Total Availability (000's)	592	622	653	685	717	749	783	816	838	873

MANPOWER NEEDS AND AVAILABILITY

State: Oklahoma

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	54	179	179	179	179	179	179	179	179	179
Alternative 1 Needs Estimated	4, 988	5, 036	5, 090	5, 149	5, 213	5, 252	5, 310	5, 361	5, 412	5, 445
Alternative 2 Needs Estimated	1, 613	1, 628	1, 643	1, 662	1, 680	1, 697	1, 712	1, 728	1, 742	1, 758
Estimated Manpower Availability	11, 043	11, 313	11, 610	11, 934	12, 231	12, 555	12, 852	13, 176	13, 500	13, 824
Estimated Total Availability (000's)	409	419	430	442	453	465	476	486	500	512
One- to Three-Year College Skill Level										
Estimated Manpower Availability	3, 402	3, 510	3, 618	3, 753	3, 861	3, 969	4, 077	4, 212	4, 320	4, 455
Estimated Total Availability (000's)	126	130	134	139	143	147	151	156	160	165
Four-Year College Skill Level										
State Manpower Needs Estimated	8	11	11	11	11	11	11	12	12	12
Alternative 1 Needs Estimated	720	741	760	785	807	833	861	887	919	949
Alternative 2 Needs Estimated	349	358	367	380	391	404	416	428	444	457
Estimated Manpower Availability	30, 332	30, 752	31, 145	31, 582	32, 002	32, 395	32, 832	33, 296	33, 733	34, 157
Estimated Manpower Availability (Teachers)	25, 823	26, 027	26, 231	26, 452	26, 656	26, 860	27, 081	27, 302	27, 523	27, 727
Estimated Total Availability (000's)	152	160	168	176	184	192	200	208	216	224

MANPOWER NEEDS AND AVAILABILITY

State: Oregon

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	481	516	524	558	601	643	686	696	696	696
Alternative 1 Needs Estimated	1,282	1,308	1,341	1,376	1,416	1,443	1,465	1,488	1,515	1,541
Alternative 2 Needs Estimated	415	423	431	442	456	457	472	480	487	496
Estimated Manpower Availability	12,180	12,540	12,930	13,320	13,710	14,100	15,330	15,780	16,230	16,680
Estimated Total Availability (000's)	406	418	431	444	457	470	511	526	541	556
One - to Three-Year College Skill Level										
Estimated Manpower Availability	4,770	4,920	5,070	5,220	5,370	5,520	5,700	5,850	6,030	6,210
Estimated Total Availability (000's)	159	164	169	174	179	184	190	195	201	207
Four-Year College Skill Level										
State Manpower Needs Estimated	15	18	19	19	20	20	20	21	21	21
Alternative 1 Needs Estimated	565	582	604	623	644	668	692	715	743	769
Alternative 2 Needs Estimated	270	278	286	297	307	317	327	337	349	361
Estimated Manpower Availability	26,658	27,192	27,744	28,326	28,908	29,508	30,108	30,708	31,356	32,004
Estimated Manpower Availability(Teachers)	22,338	22,662	23,004	23,346	23,688	24,048	24,408	24,768	25,146	25,524
Estimated Total Availability (000's)	144	151	158	166	174	182	190	198	207	216

MANPOWER NEEDS AND AVAILABILITY

State: Pennsylvania

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	3,426	4,297	4,713	5,065	5,409	5,755	6,185	6,512	6,512	6,512
Alternative 1 Needs Estimated	4,368	4,455	4,554	4,664	4,794	4,875	4,960	5,002	5,138	5,231
Alternative 2 Needs Estimated	2,158	2,186	2,218	2,255	2,286	2,315	2,343	2,372	2,402	2,432
Estimated Manpower Availability	32,355	33,075	33,795	34,515	35,250	35,985	36,735	37,485	38,250	39,015
Estimated Total Availability (000's)	2,157	2,205	2,253	2,301	2,350	2,399	2,449	2,499	2,550	2,601
One- to Three-Year College Skill Level										
Estimated Manpower Availability	8,550	8,820	9,090	9,360	9,630	9,900	10,170	10,455	10,725	11,010
Estimated Total Availability (000's)	570	588	606	624	642	660	678	697	715	734
Four-Year College Skill Level										
State Manpower Needs Estimated	1,340	1,761	2,076	2,088	2,105	2,116	2,121	2,152	2,152	2,152
Alternative 1 Needs Estimated	1,870	1,942	2,028	2,115	2,207	2,302	2,405	2,512	2,625	2,747
Alternative 2 Needs Estimated	911	947	985	1,025	1,067	1,115	1,162	1,212	1,265	1,322
Estimated Manpower Availability	105,599	106,575	107,538	108,529	109,520	110,524	111,515	112,534	113,553	114,583
Estimated Manpower Availability(Teachers)	95,069	95,550	96,018	96,499	96,980	97,474	97,955	98,449	98,943	99,437
Estimated Total Availability (000's)	702	735	768	802	836	870	904	939	974	1,010

MANPOWER NEEDS AND AVAILABILITY

State: Rhode Island

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	95	124	169	202	261	321	355	389	453	453
Alternative 1 Needs Estimated	343	347	356	361	373	378	385	390	396	403
Alternative 2 Needs Estimated	132	134	137	139	144	146	148	150	153	154
Estimated Manpower Availability	3,888	3,996	4,104	4,212	4,293	4,428	4,536	4,644	4,752	4,860
Estimated Total Availability (000's)	144	148	152	156	159	164	168	172	176	180
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,242	1,269	1,323	1,350	1,377	1,431	1,485	1,512	1,566	1,593
Estimated Total Availability (000's)	46	47	49	50	51	53	55	56	58	59
Four-Year College Skill Level										
State Manpower Needs Estimated	98	106	198	198	198	198	198	198	198	198
Alternative 1 Needs Estimated	139	144	150	156	162	165	176	183	191	200
Alternative 2 Needs Estimated	104	106	109	112	114	118	121	126	129	133
Estimated Manpower Availability	8,726	8,819	8,952	9,058	9,178	9,324	9,457	9,590	9,736	9,842
Estimated Manpower Availability(Teachers)	7,241	7,280	7,332	7,384	7,423	7,488	7,540	7,592	7,657	7,709
Estimated Total Availability (000's)	55	57	60	62	65	68	71	74	77	79

MANPOWER NEEDS AND AVAILABILITY

State: South Carolina

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	574	650	800	868	923	978	1,032	1,084	1,084	1,084
Alternative 1 Needs Estimated	2,562	2,591	2,627	2,662	2,699	2,730	2,763	2,798	2,830	2,864
Alternative 2 Needs Estimated	1,002	1,012	1,032	1,035	1,049	1,061	1,072	1,084	1,095	1,108
Estimated Manpower Availability	5,814	6,023	6,232	6,460	6,688	6,916	7,144	7,372	7,619	7,866
Estimated Total Availability (000's)	306	317	328	340	352	364	376	388	401	414
One- to Three-Year College Skill Level										
Estimated Manpower Availability	2,242	2,318	2,413	2,489	2,584	2,679	2,774	2,850	2,945	3,059
Estimated Total Availability (000's)	118	122	127	131	136	141	146	150	155	161
Four-Year College Skill Level										
State Manpower Needs Estimated	172	276	367	402	438	473	509	549	549	549
Alternative 1 Needs Estimated	563	583	606	627	648	674	699	724	753	784
Alternative 2 Needs Estimated	279	288	297	307	317	328	339	353	365	379
Estimated Manpower Availability	27,579	28,020	28,478	28,936	29,394	29,852	30,346	30,804	31,298	31,809
Estimated Manpower Availability(Teachers)	24,786	25,075	25,381	25,687	25,993	26,299	26,622	26,928	27,251	27,591
Estimated Total Availability (000's)	147	155	163	171	179	187	196	204	213	222

MANPOWER NEEDS AND AVAILABILITY

State: South Dakota

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	209	227	239	241	244	247	250	253	253	253
Alternative 1 Needs Estimated	1,029	1,035	1,048	1,059	1,073	1,084	1,091	1,099	1,109	1,118
Alternative 2 Needs Estimated	327	329	332	334	339	341	344	346	350	353
Estimated Manpower Availability	3,503	3,565	3,658	3,720	3,782	3,844	3,906	3,968	4,030	4,123
Estimated Total Availability (000's)	113	115	118	120	122	124	126	128	130	133
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1,612	1,612	1,643	1,674	1,705	1,736	1,767	1,798	1,798	1,829
Estimated Total Availability (000's)	52	52	53	54	55	56	57	58	58	59
Four-Year College Skill Level										
State Manpower Needs Estimated	258	280	308	316	320	326	330	335	335	335
Alternative 1 Needs Estimated	481	486	495	504	511	520	530	539	548	410
Alternative 2 Needs Estimated	232	234	237	239	244	248	251	254	259	264
Estimated Manpower Availability	10,156	10,218	10,272	10,334	10,420	10,451	10,536	10,621	10,652	10,757
Estimated Manpower Availability(Teachers)	9,071	9,071	9,094	9,094	9,118	9,118	9,141	9,164	9,164	9,187
Estimated Total Availability (000's)	35	37	38	40	42	43	45	47	48	50

MANPOWER NEEDS AND AVAILABILITY

State: Tennessee

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	674	795	915	1, 035	1,155	1, 275	1, 395	1, 515	1, 515	1, 515
Alternative 1 Needs Estimated	3, 996	4, 045	4, 102	4, 162	4, 227	4, 283	4, 334	4, 399	4, 461	4, 522
Alternative 2 Needs Estimated	1, 285	1, 299	1, 315	1, 333	1, 354	1, 369	1, 385	1, 403	1, 420	1, 437
Estimated Manpower Availability	9, 504	9, 828	10,170	10,512	10,872	11,232	11,592	11,952	12,330	12,736
Estimated Total Availability (000's)	528	546	565	584	604	624	644	664	685	707
One - to Three-Year College Skill Level										
Estimated Manpower Availability	3, 546	3, 690	3, 816	3, 942	4, 086	4, 230	4, 374	4, 518	4, 662	4, 806
Estimated Total Availability (000's)	197	205	212	219	227	235	243	251	259	267
Four-Year College Skill Level										
State Manpower Needs Estimated	241	304	358	423	487	552	617	681	681	681
Alternative 1 Needs Estimated	796	824	856	886	947	955	995	1, 036	1,078	1, 121
Alternative 2 Needs Estimated	414	427	441	457	464	491	508	527	546	567
Estimated Manpower Availability	37, 018	37, 640	38, 248	38, 888	39, 542	40, 196	40, 850	41, 536	42, 222	42, 926
Estimated Manpower Availability(Teachers)	33, 292	33, 698	34, 090	34, 496	34, 916	35, 336	35, 756	36, 190	36, 624	37, 058
Estimated Total Availability (000's)	207	219	231	244	257	270	283	297	311	326

MANPOWER NEEDS AND AVAILABILITY

State: Texas

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,447	2,288	2,944	2,981	3,018	3,055	3,092	3,112	3,112	3,112
Alternative 1 Needs Estimated	12,164	12,367	12,486	12,635	12,790	13,005	13,021	13,139	13,257	13,378
Alternative 2 Needs Estimated	3,926	3,995	4,035	4,084	4,132	4,168	4,206	4,245	4,281	4,321
Estimated Manpower Availability	26,256	27,216	28,208	29,232	30,272	31,344	32,432	33,552	34,704	35,888
Estimated Total Availability (000's)	1,641	1,701	1,763	1,827	1,892	1,959	2,027	2,097	2,169	2,243
One- to Three-Year College Skill Level										
Estimated Manpower Availability	11,600	12,000	12,416	12,848	13,280	13,728	14,192	14,656	15,136	15,632
Estimated Total Availability (000's)	725	750	776	803	830	858	887	916	946	977
Four-Year College Skill Level										
State Manpower Needs Estimated	1,795	2,362	3,668	3,923	4,173	4,423	4,673	4,883	4,883	4,883
Alternative 1 Needs Estimated	2,264	2,275	2,348	2,425	2,509	2,598	2,743	2,788	2,884	2,990
Alternative 2 Needs Estimated	1,134	1,165	1,199	1,238	1,276	1,319	1,363	1,407	1,455	1,506
Estimated Manpower Availability	119,529	121,973	124,467	127,027	129,621	132,281	134,958	137,718	140,528	143,404
Estimated Manpower Availability(Teachers)	108,137	109,973	111,843	113,747	115,685	117,657	119,646	121,686	123,760	125,868
Estimated Total Availability (000's)	712	750	789	830	871	914	957	1,002	1,048	1,096

MANPOWER NEEDS AND AVAILABILITY

State: Utah

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	248	255	261	265	270	274	279	286	286	286
Alternative 1 Needs Estimated	605	611	627	640	658	667	676	689	700	711
Alternative 2 Needs Estimated	194	197	201	207	213	215	220	228	234	237
Estimated Manpower Availability	7,215	7,474	7,733	7,992	8,251	8,547	8,843	9,139	9,435	9,731
Estimated Total Availability (000's)	195	202	209	216	223	231	239	247	255	263
One- to Three-Year College Skill Level										
Estimated Manpower Availability	3,515	3,626	3,737	3,848	3,996	4,107	4,218	4,366	4,514	4,662
Estimated Total Availability (000's)	95	98	101	104	108	111	114	118	122	126
Four-Year College Skill Level										
State Manpower Needs Estimated	13	13	13	13	13	13	13	14	14	14
Alternative 1 Needs Estimated	310	320	329	343	352	360	374	389	405	410
Alternative 2 Needs Estimated	157	161	166	170	176	181	187	191	198	206
Estimated Manpower Availability	14,123	14,480	14,868	15,256	15,644	16,069	16,457	16,902	17,347	17,755
Estimated Manpower Availability(Teachers)	11,300	11,520	11,760	12,000	12,240	12,480	12,720	12,980	13,240	13,500
Estimated Total Availability (000's)	76	80	84	88	92	97	101	106	111	115

MANPOWER NEEDS AND AVAILABILITY

State: Vermont

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	210	424	431	455	479	505	529	544	544	544
Alternative 1 Needs Estimated	677	684	688	698	706	713	719	727	733	741
Alternative 2 Needs Estimated	228	229	231	233	236	237	238	240	241	242
Estimated Manpower Availability	2,117	2,175	2,233	2,291	2,349	2,407	2,465	2,523	2,610	2,668
Estimated Total Availability (000's)	73	75	77	79	81	83	85	87	90	92
One- to Three-Year College Skill Level										
Estimated Manpower Availability	783	812	841	870	870	899	928	928	957	986
Estimated Total Availability (000's)	27	28	29	30	30	31	32	32	33	34
Four-Year College Skill Level										
State Manpower Needs Estimated	189	248	278	283	290	295	302	310	310	310
Alternative 1 Needs Estimated	124	126	128	132	134	138	142	145	151	157
Alternative 2 Needs Estimated	69	70	71	72	74	75	78	79	81	83
Estimated Manpower Availability	4,936	5,028	5,091	5,171	5,234	5,326	5,400	5,469	5,578	5,641
Estimated Manpower Availability(Teachers)	4,182	4,216	4,250	4,301	4,335	4,369	4,420	4,454	4,505	4,539
Estimated Total Availability (000's)	26	28	29	30	31	33	34	35	37	38

MANPOWER NEEDS AND AVAILABILITY

State: Virginia

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	1,042	1,129	1,215	1,300	1,386	1,472	1,547	1,567	1,567	1,567
Alternative 1 Needs Estimated	3,342	3,416	3,461	3,516	3,566	3,611	3,658	3,702	3,750	3,761
Alternative 2 Needs Estimated	1,082	1,093	1,105	1,121	1,136	1,150	1,164	1,177	1,191	1,206
Estimated Manpower Availability	14,652	15,202	15,774	16,346	16,940	17,556	18,194	18,832	19,492	20,152
Estimated Total Availability (000's)	666	691	717	743	770	798	827	856	886	916
One- to Three-Year College Skill Level										
Estimated Manpower Availability	6,160	6,402	6,622	6,864	7,106	7,348	7,612	7,876	8,140	8,426
Estimated Total Availability (000's)	280	291	301	312	323	334	346	358	370	383
Four-Year College Skill Level										
State Manpower Needs Estimated	992	1,124	1,261	1,261	1,261	1,261	1,261	1,261	1,261	1,261
Alternative 1 Needs Estimated	767	797	830	862	896	934	973	1,017	1,060	1,107
Alternative 2 Needs Estimated	468	482	497	513	531	552	572	592	612	634
Estimated Manpower Availability	50,022	51,110	52,236	53,410	54,526	55,722	56,940	58,158	59,431	60,702
Estimated Manpower Availability(Teachers)	43,136	43,872	44,624	45,424	46,144	49,944	47,744	48,544	49,371	50,208
Estimated Total Availability (000's)	313	329	346	363	381	399	418	437	457	477

MANPOWER NEEDS AND AVAILABILITY

State: Washington

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	822	927	1, 014	1, 050	1, 051	1, 053	1, 054	1, 056	1, 056	1, 056
Alternative 1 Needs Estimated	3, 732	3, 736	3, 853	3, 924	4, 006	4, 034	4, 117	4, 179	4, 228	4, 301
Alternative 2 Needs Estimated	1, 217	1, 233	1, 251	1, 274	1, 297	1, 315	1, 328	1, 346	1, 363	1, 382
Estimated Manpower Availability	14, 560	14, 976	15, 366	15, 782	16, 224	16, 640	17, 082	17, 524	17, 966	18, 434
Estimated Total Availability (000's)	560	576	591	607	624	640	657	674	691	709
One- to Three-Year College Skill Level										
Estimated Manpower Availability	6, 344	6, 500	6, 656	6, 838	7, 020	7, 202	7, 358	7, 566	7, 748	7, 930
Estimated Total Availability (000's)	244	250	256	263	270	277	283	291	298	305
Four-Year College Skill Level										
State Manpower Needs Estimated	50	89	95	100	92	92	92	94	94	94
Alternative 1 Needs Estimated	719	745	773	804	836	870	905	945	986	1, 029
Alternative 2 Needs Estimated	335	347	360	376	391	407	423	441	462	493
Estimated Manpower Availability	35, 250	35, 830	36, 410	37, 006	37, 628	38, 224	38, 846	39, 484	40, 132	40, 770
Estimated Manpower Availability(Teachers)	29, 296	29, 616	29, 936	30, 272	30, 608	30, 944	31, 280	31, 632	31, 968	32, 320
Estimated Total Availability (000's)	229	239	249	259	270	280	291	302	314	325

MANPOWER NEEDS AND AVAILABILITY

State: West Virginia

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	426	579	814	913	1,013	1,112	1,211	1,317	1,317	1,317
Alternative 1 Needs Estimated	1,891	1,908	1,932	1,956	1,971	2,003	2,024	2,043	2,065	2,086
Alternative 2 Needs Estimated	613	618	626	630	638	644	653	659	663	670
Estimated Manpower Availability	7,084	7,196	7,336	7,476	7,588	7,728	7,868	7,980	8,120	8,232
Estimated Total Availability (000's)	253	257	262	267	271	276	281	285	290	294
One- to Three-Year College Skill Level										
Estimated Manpower Availability	2,380	2,436	2,492	2,548	2,604	2,660	2,716	2,772	2,800	2,856
Estimated Total Availability (000's)	85	87	89	91	93	95	97	99	100	102
Four-Year College Skill Level										
State Manpower Needs Estimated	237	381	470	503	539	575	610	651	651	651
Alternative 1 Needs Estimated	440	444	459	476	490	509	528	548	595	597
Alternative 2 Needs Estimated	228	235	241	249	257	267	275	284	295	305
Estimated Manpower Availability	18,986	19,038	19,105	19,172	19,239	19,306	19,373	19,440	19,507	19,574
Estimated Manpower Availability(Teachers)	16,410	16,350	16,305	16,260	16,215	16,170	16,125	16,080	16,035	15,990
Estimated Total Availability (000's)	92	96	100	104	108	112	116	120	124	128

MANPOWER NEEDS AND AVAILABILITY

State: Wisconsin

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	604	1, 082	2, 277	2, 380	2, 483	2, 586	2, 689	2, 792	2, 792	2, 792
Alternative 1 Needs Estimated	5, 025	5, 079	5, 137	5, 197	5, 270	5, 317	5, 366	5, 418	5, 467	5, 521
Alternative 2 Needs Estimated	1, 643	1, 658	1, 675	1, 695	1, 716	1, 724	1, 754	1, 766	1, 783	1, 800
Estimated Manpower Availability	15, 729	16, 149	16, 569	17, 010	17, 451	17, 892	18, 354	18, 816	19, 299	19, 761
Estimated Total Availability (000's)	749	769	789	810	831	852	874	896	919	941
One- to Three-Year College Skill Level										
Estimated Manpower Availability	5, 313	5, 481	5, 628	5, 796	5, 964	6, 132	6, 300	6, 468	6, 657	6, 846
Estimated Total Availability (000's)	253	261	268	276	284	292	300	308	317	326
Four-Year College Skill Level										
State Manpower Needs Estimated	106	140	142	148	154	160	166	170	170	170
Alternative 1 Needs Estimated	962	998	1, 031	1, 066	1, 103	1, 144	1, 190	1, 232	1, 280	1, 329
Alternative 2 Needs Estimated	477	493	510	529	547	566	586	606	630	653
Estimated Manpower Availability	46, 086	46, 751	47, 436	48, 138	48, 824	49, 526	50, 249	50, 972	51, 711	52, 451
Estimated Manpower Availability(Teachers)	40, 920	41, 333	41, 745	42, 174	42, 587	43, 016	43, 445	43, 874	44, 319	44, 765
Estimated Total Availability (000's)	246	258	271	284	297	310	324	338	352	366

MANPOWER NEEDS AND AVAILABILITY

State: Wyoming

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
High School Skill Level										
State Manpower Needs Estimated	131	143	154	161	168	175	182	192	196	200
Alternative 1 Needs Estimated	884	890	900	907	915	923	931	936	945	950
Alternative 2 Needs Estimated	301	302	304	305	308	310	311	313	316	317
Estimated Manpower Availability	2, 856	2, 898	2, 940	3, 024	3, 066	3, 150	3, 192	3, 234	3, 318	3, 360
Estimated Total Availability (000's)	68	69	70	72	73	75	76	77	79	80
One- to Three-Year College Skill Level										
Estimated Manpower Availability	1, 092	1, 134	1, 134	1, 176	1, 218	1, 218	1, 260	1, 260	1, 302	1, 302
Estimated Total Availability (000's)	26	27	27	28	29	29	30	30	31	31
Four-Year College Skill Level										
State Manpower Needs Estimated	95	100	111	126	142	158	174	185	185	185
Alternative 1 Needs Estimated	272	274	279	282	287	289	297	300	305	310
Alternative 2 Needs Estimated	126	127	128	129	131	133	134	136	138	140
Estimated Manpower Availability	5, 405	5, 470	5, 535	5, 558	5, 688	5, 711	5, 776	5, 841	5, 906	5, 971
Estimated Manpower Availability(Teachers)	4, 439	4, 462	4, 485	4, 508	4, 554	4, 577	4, 600	4, 623	4, 646	4, 669
Estimated Total Availability (000's)	23	24	25	25	27	27	28	29	30	31

APPENDIX B

ALLOCATION OF GENERALIZED JOB TITLES TO MANPOWER RESOURCE SKILL LEVELS

APPENDIX B

HIGH SCHOOL SKILL LEVEL

- Motor Vehicle Inspector
- Motor Vehicle Station Inspector
- Driver License Examiner
- Driver License Hearing Officer
- Breath Examiner Specialist
- Accident Site Investigator (Police Traffic Services Officer)
- Accident Site Investigator Aide
- Engineering Aide - Safety
- Highway Safety Site Officer
- Engineering Aide - Traffic
- Traffic Control Device Technician
- Police Traffic Services Program Specialist
- Police Traffic Services Officer
- Police Traffic Services Patrolmen
- Wrecker Operator

COLLEGE SKILL LEVEL

- Governor's Highway Safety Program Director
- Highway Safety Program Analyst
- Highway Safety Public Information Officer
- Driver Training Program Specialist
- Driver Education Supervisor
- Driver Education Teacher
- Driver Retraining Instructor
- Codes and Laws Program Specialist
- Traffic Court Judges
- Traffic Court Program Specialist
- Alcohol Technical Specialist
- Accident Site Investigator (Traffic Engineer and Highway Engineer)
- Traffic Record Program Analyst
- Traffic Record System Analyst
- Emergency Medical Services Program Specialist
- Emergency Medical Services Field Representative
- Highway Engineer - Safety
- Traffic Engineer
- Pedestrian Safety Program Specialist
- State Wrecker Field Representative
- School Bus Program Specialist
- School Bus Driver Training Officer

Safety Specialist Manpower

Manpower Training

Volume III

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The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Safety Bureau.

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October 14, 1968

Dr. William Tarrants
National Highway Safety Bureau
Department of Transportation
Washington, D. C.

Reference: Contract FH-11-6496, "Safety Specialist Manpower"

Dear Dr. Tarrants:

We take pleasure in submitting to you the enclosed report on state safety manpower training. This report is the third of four volumes on the subject of staffing state highway safety programs.

The report presents data on current and planned safety education and training program activities at major institutions and state agencies. Training curricula and courses are related to safety specialist job titles, and their corresponding enrollment estimates are portrayed year by year for the 1968-1977 period. As in the first volume, the information contained herein results from Booz, Allen & Hamilton staff visits to all 50 states.

Among the primary findings of this training study are the following:

- Safety training resources currently exist for 13 of 18 highway safety program areas and for 25 of the 36 safety specialist job titles developed in Volume I (Manpower Requirements).
- Total state enrollment in safety training programs is estimated by state and institutional officials to rise 30%, from approximately 36,000 in 1968 to 47,000 in 1977.
- Over 40% of the state enrollment expansion over the decade is expected to be realized by 1970.
- More than four-fifths of the projected enrollment increase occurs in two program areas: Driver Education and Police Traffic Services.

To determine the extent to which they fulfill the entering education and/or special training requirements specified in the job descriptions, safety curricula and courses were assigned a status of "complete," "partial," "refresher," or "additional."

The major limiting factor to obtaining state safety training program data stemmed from the fact that our state visits frequently occurred before many state and institutional officials had sufficient opportunity to become well acquainted with the newly issued National Highway Safety Standards or to determine how these standards would affect training programs to meet future safety manpower requirements. In spite of this problem, we believe that the material contained in this report is sufficiently comprehensive to serve as a guideline for safety training program planning on both a state and a nationwide scale, that is:

- The data indicate the magnitude of safety specialist training activities on a program-by-program basis.
- The data reveal those program standard areas which will require additional training resources.

We have enjoyed the opportunity to participate in this study and wish to extend our appreciation both to the National Highway Safety Bureau and to the many state and institutional officials who provided the data upon which the report is based.

Very truly yours,

Booz, Allen & Hamilton Inc.

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I. INTRODUCTION

I. INTRODUCTION

This volume presents information and conclusions concerning programs for training highway safety specialists.

1. TRAINING IS ONE OF FOUR MAJOR ASPECTS OF SAFETY MANPOWER

Four major aspects of the safety manpower problem are:

- Manpower requirements
- Manpower resources
- Manpower training
- Manpower action plans

In Volume I, on Manpower Requirements, data are presented that demonstrate that state highway safety programs require more safety specialists than are currently employed. A gap also exists between the present numbers of trained personnel and future needs. This gap creates an additional training need in terms of both supplementary training for current staff and full training for new staff. Volume II, on Manpower Resources, identifies the pool of people who could be drawn upon to fill the manpower needs. This volume deals with training programs for the people who are to work for state government highway safety programs.

2. THIS REPORT PRESENTS DATA ON EXISTING FACILITIES AND ESTIMATES OF FUTURE FACILITIES FOR TRAINING NEEDED STATE SAFETY MANPOWER

The objectives of this volume are to:

- Provide an inventory of existing and planned highway safety courses and curricula in state government agencies and in selected colleges and universities.
- Provide an estimate of existing and planned capacity to train highway safety specialists identified in Volume I.

The empirical data to achieve these objectives are presented in two appendixes.

Appendix A identifies, by state and training institution, the curricula and courses currently offered or planned which provide training for safety secialists. Estimates of enrollments for each curriculum and course are provided by year for the period 1968 to 1977. Also provided are the safety specialist job titles for which training is given and the extent of training offered. (The extent of training is related to training requirements presented in the generalized job description of Volume I.) Data cover all 50 states and the District of Columbia.

Appendix B presents data by state to indicate capacity to train personnel in particular safety specialist job titles. Enrollment estimates for each year 1968 through 1977 are presented by safety specialist job titles and by extent of training. Job titles are organized under their respective highway safety program areas.

II. METHODOLOGY

II. METHODOLOGY

This chapter describes the methodology used to assemble the information on existing and planned safety manpower training which forms the basis of this report.

1. THE FUNDAMENTAL RATIONALE AND PARAMETERS OF THIS STUDY CLOSELY PARALLEL THE GUIDELINES OF THE MANPOWER REQUIREMENTS REPORT

As explained in Volume I:

- This study applied to employees of state governments even though the highway safety program pertains to Federal, state, and local government employees and to employees of private safety associations. It relates only to job titles that are likely to be found in state government employment.
- This study applies only to safety specialists, i. e., state employees functioning in areas which require technical knowledge about highway safety principles and practices.
- The study is structured mainly within the context of the National Highway Safety Bureau Program Standards, which are listed in the Introduction to Volume I, and which serve as guidelines for both state and Federal highway safety programs.

2. THE STUDY APPROACH WAS DESIGNED TO ASSURE COMPREHENSIVE COVERAGE OF PROGRAMS PROVIDING TRAINING FOR SAFETY SPECIALISTS

- A review was made of publications describing safety education offerings. This review included Safety Education Courses in Colleges and Universities, a listing of highway traffic and safety centers at colleges and universities, published by the National Safety Council, and Courses in Highway Safety and Highway Traffic, A Directory of College and University Offerings, published by the National Education Association. From this review, a list of colleges and universities was drawn up which would cover the major portion of the current offerings in highway safety education. This list was developed to assure that in our field visits:
    - At least one college or university in every state was called upon.
    - All Highway Traffic and Safety Centers listed by the National Safety Council were visited.
    - Courses that provide training unique to highway safety programs were sought in preference to programs in general education applicable to a variety of areas, e.g., administrative or management courses, unless such general training was specifically oriented towards the management of highway safety programs.
- Emphasis was given to colleges and universities having:
    - Many courses in highway safety rather than one or a few courses.
    - Courses in a variety of relevant fields, e.g., driver education, traffic engineering, accident medicine.
    - Relatively large enrollments in highway safety courses.

- Interview questionnaires were designed to assure uniform collection of data. Separate questionnaires* were constructed for safety curricula and safety courses. A curriculum was defined as a formal training program or a "package" of courses developed by an institution to produce a specified educational product, e.g., a traffic engineer. A course was generally defined as a single purpose offering listed in an institutional catalog.

- The suitability of the questionnaires was tested during pilot visits to the states of California, Massachusetts, and Minnesota. During these interviews, it became clear that not all safety manpower training is provided by colleges and universities, and that state agencies also are a major training ground. As a result of this finding, an in-service questionnaire was constructed, and the scope of the study was broadened to encompass courses formally given by state agencies. In-service training was defined as:

    - Training provided to personnel after initial recruitment by a state government

    - Training requiring an individual to leave his job during the training period, i.e., not on-the-job training

    - Comprehensive training courses for particular job titles rather than components of that comprehensive training. All in-service training took the form of courses rather than curricula. Courses offering technical training rather than supervisory or orientation training were selected.

3. THIS STUDY IS BASED UPON INFORMATION GATHERED THROUGH PERSONAL INTERVIEWS WITH INSTITUTIONAL AND STATE OFFICIALS

The selected institutions and state agencies were visited during Booz, Allen & Hamilton field trips to 50 states, as described in Volume I.

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* Copies of the three types of questionnaires are contained in Appendix D.

Institutions in the District of Columbia were also visited. Booz, Allen & Hamilton staff met with the Governor's Highway Safety Program Representative and with institutional and state agency officials. Deans of relevant departments or schools within universities and the directors of safety training programs and curricula were the usual contacts. This report is primarily a presentation of the findings accumulated during those interviews.

During the field visits, we:

- Identified existing and planned highway safety training programs. Institutional and state agency catalogs, announcements, and brochures served as an initial guide to appropriate people and programs. At institutions, Booz, Allen & Hamilton staff members described the kinds of training for which we were looking, and the contacted personnel confirmed the list of programs identified. At state agencies, officials were asked, at the time they were interviewed concerning their safety manpower requirements, to identify relevant in-service training programs.
- Obtained from responsible officials, a synopsis of each curriculum or course including name, content description, prerequisites, length, frequency, and degrees or credits obtained.
- Identified safety specialist job titles for which the curriculum or course provides training.

- Obtained for each curriculum or course, the number of enrollees at the time of the visit (Fiscal Year 1968). Enrollment estimates for 1969 and succeeding years are based on the assumption that institutions and state agencies would be using existing facilities or those for which there were already firm plans. For example, at the time of the visit to Delaware, their State Police were in the process of acquiring a new state training academy; future Delaware training facility capability includes this academy. Officials were asked to consider in their estimates the effect that full scale implementation of the national highway safety program would have on student enrollment in safety courses.

- Obtained and recorded for each curriculum or course, the number of enrollees projected for 1969, 1970, and 1975.

- Obtained an estimate of costs to augment enrollment by expanding the teaching staff or the physical plant.

4. TRAINING OFFERED BY STATES IS MATCHED WITH TRAINING REQUIRED BY THE GENERALIZED SAFETY SPECIALIST JOB DESCRIPTIONS

One purpose of this report is to provide a basis for planning training programs for the safety specialists identified in Volume I. Therefore, the training data are related to the job titles presented in Volume I. The matching of state curricula and courses with safety specialist job titles has been accomplished by comparing the title, content, level, and length of training for each curriculum or course with the scope, duties, education, experience, and special training requirements specified in the generalized job descriptions. (This matching process was aided by identifying, during our state visits, the job titles for which the curriculum or course was intended to provide training.) A curriculum or course was not considered to provide training for a particular job title unless the former included specific training related to the latter.

5. EDUCATIONAL AND TRAINING DATA ARE PRESENTED IN DETAIL IN APPENDIXES A AND B

Detailed data resulting from this study are presented in Appendixes A and B. Appendix A presents for training in each state:

- Name of institution or agency
- Title of curriculum or course
- Status of training
- Length of training
- Generalized job title for which training provides preparation
- Estimated enrollment by year for the period 1968-1977

Within each state, institutional training is grouped together in alphabetical order and shown first, followed by state agency in-service training. Curricula are set off completely in capital letters while courses are shown with initial letters capitalized but others in lower case. Courses which are part of a curriculum are indented under that curriculum.

The "status" of training describes whether the curricula and courses provide complete, partial, additional or refresher training for the specified job title. Courses providing complete training are indicated under the "status" column by a blank space; those that provide partial training by a "P"; those that provide additional training by an "A"; and those that provide refresher training by an "R". Categorization is based upon the extent to which a curriculum or course provides the entering education and/or special training requirements outlined in the job descriptions presented in Volume I. "Complete" and "partial" refer to the major safety training that is required by a job title; i. e., generally, the entering safety education requirement for job titles requiring a college or graduate degree and the post-recruitment safety training requirement for job titles calling for high school completion. Courses were labeled as "partial," "additional," or "refresher" only where complete satisfaction of a given training requirement was not provided. Courses which are listed as "additional" are defined as those which offer only training beyond the minimum level required to fulfill the specifications of a safety specialist job title but do not offer both minimum and additional training. For example, well developed supervisory or orientation in-service training is usually categorized as additional.

Refresher training varies considerably among states. Review courses which are offered at least once a year and courses which upgrade a person's training or prepare him for promotion are listed as "refresher." However, in a number of states, in-service training for a particular job title is identified as refresher, even though there is not any preceding basic training indicated for that job title. This categorization issue arises for the following reasons:

- For job titles requiring college preparation, the "basic" training is often acquired at a university or college, often in a different state.
- In most states, Police Traffic Services Officers typically complete a basic recruit course as patrolmen and are promoted to the officer level from the ranks without further "basic" training.
- Some states may regard their in-service training as basic training, but on a national basis, the courses involved realistically compare to (a) refresher-type courses in other states where training programs are better developed, or (b) the refresher specifications on the generalized job descriptions.

The length of training offered for both curricula and courses is shown. The length of all in-service training is shown in hours. When the length of training is an estimate, it is indicated by an "E" in parentheses.

Safety specialist job titles for which curricula and courses provide preparation are indicated. If a curriculum or course provides basic training for a progression of job titles within a career ladder, it is identified with the entering job title requiring the least training. For example, a curriculum or course which trains both a Police Traffic Services Officer and a Police Traffic Services Patrolman will be shown as training the latter.

In those cases where a curriculum providing complete training for a basic job title in a career ladder includes a course providing partial training for an advanced job title, entries are made for both job titles. For example, if a curriculum trains a Driver Education Teacher, but contains a course which offers training for a Driver Education Supervisor, the estimated enrollment of the curriculum is included in the total for Driver Education Teacher complete training and the estimated enrollment of the course is included in the total for Driver Education Supervisor partial training. Where a curriculum providing training for an advanced job title in a career ladder includes a course providing partial training for a more basic job title, only a curriculum entry for the advanced job title is made.

Enrollment estimates of institutional and state agency curricula and courses for the year 1968-1977 are shown by year. Enrollment estimates are for total enrollments each year. Therefore, if an individual is enrolled in a two-year curriculum, he is included in curriculum enrollment estimates for both years.

Appendix B presents enrollment summaries by program, job title, and extent of training (complete, partial, additional, refresher) for each state and the District of Columbia. State enrollment totals for each job title were computed by adding the enrollments for that job title at each institution and state agency for each level of training. Where the enrollment was estimated to be in a range, the midpoint of the range was used. In those instances where enrollment for both a curriculum and its corresponding courses are recorded, the curriculum enrollment estimates were included in the state totals and the course enrollment estimates are omitted. (To include both would constitute double counting.) Where no curriculum enrollment was recorded but several courses were listed with various enrollment levels, the highest enrollment level was taken as the best indication of training capacity.

In both appendixes, enrollment figures may include some individuals who will eventually enter other vocations and not fill positions as highway safety specialists. However, total enrollments indicate capacity to train highway safety specialists, and have, therefore, been included without adjustments for this factor.

6. STATE ENROLLMENT ESTIMATES REPRESENT THE BEST PRACTICAL WAY OF MEASURING INSTITUTIONAL TRAINING CAPACITY

Institutional training capacity is very flexible. It can vary by the number of times per year a course is offered, the number of sections per course, and the enrollment per section. Off-campus as well as on-campus courses can be given. There is, therefore, considerable flexibility in the number of students an institution can train, which makes the line between realistic and overly optimistic estimates of capacity a difficult one to draw. However, enrollment estimates collected from state officials during the study were based on the assumption of adequate capacity to train enrollees. These enrollment estimates, therefore, represent a practical and conservative way of measuring institutional training capacity.

7. SEVERAL JOB TITLES REQUIRING SAFETY TRAINING BUT NOT INCLUDED IN THE MANPOWER REQUIREMENTS REPORT ARE INCORPORATED IN THIS STUDY

In the course of the Booz, Allen & Hamilton visits to the state educational facilities, training for ambulance drivers, ambulance attendants, and school bus drivers was occasionally identified. While these job titles do not fall within the scope of this study because such personnel are not normally employed by state governments, they are of considerable importance to the Emergency Medical Services and School Bus Safety programs. Because of their importance, information on relevant training programs was gathered when identified and has been included in Appendix C.

8. COURSES OFFERED THROUGHOUT THE COUNTRY BY ORGANIZATIONS SUCH AS THE AMERICAN RED CROSS AND THE NATIONAL SAFETY COUNCIL HAVE BEEN OMITTED FROM THIS REPORT

First Aid and related courses sponsored by the American Red Cross in all 50 states and the District of Columbia are typically open to a broad spectrum of people including safety specialists. Since these courses are not designed primarily for safety specialists and are available on a nationwide basis to the entire population, they have not been included in the state training program summaries except when they form an integral part of basic recruit training for Police Traffic Services Patrolmen. Similarly, the National Safety Council courses, including defensive driver training, which are also available to everyone on a nationwide basis, have not been included.

8. ENROLLMENT PROJECTIONS WERE OBTAINED FOR SELECTED YEARS AND INTERPOLATED FOR REMAINING YEARS

Enrollment estimates were gathered in staff field visits for the years 1968, 1969, and 1975. Enrollment forecasts for the years 1971, 1972, 1973, and 1974 have been interpolated from the information obtained.

States' estimates for 1976 and 1977 are generally restatements of the estimates for 1975 and so are equal to the latter unless actual estimates for 1976 and 1977 were supplied by the states. As in the manpower requirements report, the procedure in this study was to project state enrollment for those years beyond the last year for which data were obtained. In some cases, it was necessary to project enrollments for all years beyond 1968, 1969, or 1970 because the projections were not made by officials in the states. Where the states did not furnish any indication as to current or future enrollment levels, they were estimated to be zero.

III. LIMITATIONS OF DATA

III. LIMITATIONS OF DATA

In a study of this scope and magnitude, the collection, analysis, and presentation of data are influenced by a variety of factors. Some of these factors can affect the meaning and usefulness of data. This chapter points out a number of factors affecting the data of this study and suggests some considerations to be kept in mind in interpreting and utilizing the data.

1. ENROLLMENT ESTIMATES ARE AFFECTED BY THE AVAILABILITY OF PROGRAM GUIDANCE

As pointed out in Volume I, National Highway Safety Bureau program guidance arrived in the states only a short time before Booz, Allen & Hamilton field visits occurred. State officials had not had sufficient time to refine existing highway safety programs, formulate new programs, or define carefully their manpower requirements. Quite understandably, therefore, existing safety manpower training programs had usually not been inventoried nor had future needs been carefully estimated. Moreover, many training officials have not conventionally "planned" more than one or two years into the future and, consequently, were ill prepared to forecast enrollments beyond 1970.

The problem was compounded at many colleges and universities, (except at highway traffic and safety centers) for officials there were not yet fully aware of the manpower implications of the national highway safety program. Accordingly, they usually were unprepared to discuss safety manpower training plans with authority and, as with state officials, quite uncertain about enrollments after 1970.

Consequently, data are not always complete and zero enrollment may imply either that institutional or state officials expected no enrollment or that they declined to make any estimate.

2. COLLEGE AND UNIVERSITY TRAINING PROGRAMS OFTEN DO NOT PARALLEL HIGHWAY SAFETY PROGRAMS

College and university curricula and courses are normally organized along lines of established academic disciplines. Except for the highway traffic and safety centers, few institutions have programs devoted specifically to highway safety. Few courses, outside of driver education and traffic engineering, provide specific training to meet the requirements of the safety specialist job titles identified in Volume I. In identifying available courses, both university officials and Booz, Allen & Hamilton staff have often found it necessary to select courses only indirectly or partially related to highway safety. The choices involved in selecting courses and distributing them to safety specialist job titles were largely judgmental and based on the apparent relevance of courses to required training. (On the other hand, state agency in-service training is normally established to prepare personnel for specific jobs. Where in-service training existed, identification of proper courses and their association with appropriate job titles was usually straightforward.)

3. SOME COURSES ARE OFFERED BOTH BY INSTITUTIONS AND BY STATE AGENCIES

While courses leading toward a degree or certificate customarily are located at colleges and universities, and in-service training usually is to be found at state agency facilities, there are exceptions. A number of universities conduct in-service training courses for state employees, and, conversely, several in-service facilities offer university-level programs (although not degrees). This occasional overlapping of training facilities does not affect the estimated national enrollment totals, however, since the totals are based on the combined sum of institutional and in-service training enrollments by state.

4. DATA CONCERNING INSTITUTIONAL CAPABILITIES TO EXPAND TRAINING PROGRAM ENROLLMENTS IS TOO SKELETAL TO PERMIT RELIABLE CONCLUSIONS

Information collected which attempted to identify the ability of an institution to expand curriculum or course enrollment by increasing operating or investment costs is too incomplete to use as a base upon which to construct meaningful conclusions. Officials were unable to make satisfactory estimates of their expansion plans or expansion costs. Therefore, these data have not been included in this report.

IV. FINDINGS AND OBSERVATIONS

IV. FINDINGS AND OBSERVATIONS

Exhibits I, II, and III, following this page, summarize total state safety training activities by type of training and by program area. Exhibit IV, following Exhibit III, shows the relative contribution of complete, partial, and refresher training to the total per annum enrollment estimates. The data presented on these exhibits serve as the basis for several general observations about the status, anticipated growth, and distribution of state safety training activities.

1. CONSIDERABLE RESOURCES ARE AVAILABLE TO TRAIN CURRENT AND PROJECTED SAFETY MANPOWER REQUIREMENTS

The enrollment estimates presented in the four exhibits were obtained from state officials during the course of Booz, Allen & Hamilton staff visits to all 50 states and the District of Columbia. They reveal the existence of sizeable safety training resources:

- In 45 states, curricula which provide complete training, as defined in Chapter II, for safety specialist job titles are identified.
- In 46 states and the District of Columbia, curricula and courses which offer partial training are recorded.

EXHIBIT I

National Highway Safety Bureau
U. S. Department of Transportation

ESTIMATED ENROLLMENT
NATIONAL SUMMARY BY PROGRAM
COMPLETE TRAINING

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and administration	35	45	60	60	60	60	60	60	60	60
Periodic motor vehicle inspection	61	55	66	55	66	55	66	55	66	55
Motorcycle safety	*	*	*	*	*	*	*	*	*	*
Driver education	4,643	5,324	5,870	6,109	6,348	6,587	6,825	7,065	7,065	7,065
Driver licensing	621	1,032	713	733	753	766	780	792	802	802
Codes and laws	0	0	0	0	0	0	0	0	0	0
Traffic courts	0	0	0	0	0	0	0	0	0	0
Alcohol in relation to highway safety	325	435	465	465	465	465	465	465	465	465
Identification and surveillance of accident locations	0	0	0	0	0	0	0	0	0	0
Traffic records	0	0	0	0	0	0	0	0	0	0
Emergency medical services	29	30	30	30	30	30	30	30	30	30
Highway design, construction, and maintenance	1,498	1,617	1,739	1,749	1,758	1,768	1,777	1,787	1,787	1,787
Traffic control devices	238	286	344	354	375	392	412	429	435	432
Pedestrian safety	0	0	0	0	0	0	0	0	0	0
Police traffic services**	5,070	5,511	5,613	5,744	5,810	5,910	6,051	6,120	6,135	6,185
Accident cleanup	40	710	2,040	2,040	2,040	2,040	2,040	2,040	2,040	2,040
School bus safety	0	0	0	0	0	0	0	0	0	0
Total (excluding D. C.)	12,560	15,045	16,940	17,339	17,705	18,073	18,506	18,843	18,885	18,921
District of Columbia	3,800	4,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Total (including D. C.)	16,360	19,045	21,940	22,339	22,705	23,073	23,506	23,843	23,885	23,921

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* Included in periodic motor vehicle inspection and driver licensing.
** Excludes District of Columbia.

EXHIBIT II

National Highway Safety Bureau
U.S. Department of Transportation

ESTIMATED ENROLLMENT
NATIONAL SUMMARY BY PROGRAM
PARTIAL TRAINING

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and administration	0	0	0	0	0	0	0	0	0	0
Periodic motor vehicle inspection	151	133	160	162	164	166	168	170	170	170
Motorcycle safety	*	*	*	*	*	*	*	*	*	*
Driver education**	2,985	2,952	3,208	3,245	3,303	3,341	3,399	3,441	3,456	3,446
Driver licensing	140	200	215	217	219	221	223	225	225	225
Codes and laws	0	0	0	0	0	0	0	0	0	0
Traffic courts	76	76	76	76	76	76	76	76	76	76
Alcohol in relation to highway safety	2,565	365	445	445	445	445	445	445	445	445
Identification and surveillance of accident locations	120	120	120	120	120	120	120	120	120	120
Traffic records	0	0	0	0	0	0	0	0	0	0
Emergency medical services	0	0	0	0	0	0	0	0	0	0
Highway design, construction, and maintenance	1,475	1,559	1,589	1,616	1,640	1,668	1,691	1,722	1,722	1,722
Traffic control devices	347	391	377	382	385	390	392	398	398	398
Pedestrian safety	0	0	0	0	0	0	0	0	0	0
Police traffic services	2,505	3,095	3,675	3,725	3,675	3,740	3,675	3,755	3,675	3,755
Accident cleanup	100	100	100	100	100	100	100	100	100	100
School bus safety	95	96	128	129	130	132	133	134	134	134
Total (excluding D. C.)	10,589	9,087	10,093	10,217	10,257	10,399	10,422	10,586	10,521	10,591
District of Columbia	0	50	20	50	20	50	20	50	20	50
Total (including D. C.	10,589	9,137	10,113	10,267	10,277	10,449	10,442	10,636	10,541	10,641

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* Included in periodic motor vehicle inspection and driver licensing.
** Excludes District of Columbia.

EXHIBIT III

National Highway Safety Bureau
U. S. Department of Transportation

ESTIMATED ENROLLMENT
NATIONAL SUMMARY BY PROGRAM
REFRESHER TRAINING

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and administration	0	0	0	0	0	0	0	0	0	0
Periodic motor vehicle inspection	1,153	1,295	1,295	1,447	1,394	1,526	1,492	1,628	1,529	1,628
Motorcycle safety	*	*	*	*	*	*	*	*	*	*
Driver education	1,536	1,913	2,226	2,240	2,256	2,272	2,288	2,304	2,304	2,304
Driver licensing	845	908	950	973	995	1,012	1,034	1,058	1,058	1,058
Codes and laws	0	0	0	0	0	0	0	0	0	0
Traffic courts	400	400	370	370	370	370	370	370	370	370
Alcohol in relation to highway safety	630	630	630	630	630	630	630	630	630	630
Identification and surveillance of accident locations	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150
Traffic records	0	0	0	0	0	0	0	0	0	0
Emergency medical services	0	0	0	0	0	0	0	0	0	0
Highway design, construction, and maintenance	80	50	40	40	40	40	40	40	40	40
Traffic control devices	325	325	325	325	325	325	325	325	325	325
Pedestrian safety	0	0	0	0	0	0	0	0	0	0
Police traffic services	6,954	7,330	6,742	7,558	7,668	8,575	8,726	9,662	9,287	9,694
Accident cleanup	0	0	0	0	0	0	0	0	0	0
School bus safety	0	0	0	0	0	0	0	0	0	0
Total	12,796	13,776	13,553	14,608	14,728	15,825	16,030	17,167	16,693	17,199

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* Included in periodic motor vehicle inspection and driver licensing.

EXHIBIT IV

National Highway Safety Bureau
U. S. Department of Transportation

ESTIMATED ENROLLMENT
NATIONAL SUMMARY BY TYPE
AND DISTRIBUTION OF TRAINING*

Type of Training	1968		1969		1970		1971		1972		1973		1974		1975		1976		1977	
	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total	Estimated Enrollment	Percent of Total
Complete	12,560	34.9%	15,045	39.7%	16,940	41.7%	17,339	41.1%	17,705	41.5%	18,073	40.8%	18,506	41.2%	18,843	40.4%	18,885	41.0%	18,921	40.5%
Partial	10,589	29.5	9,087	24.0	10,093	24.9	10,217	24.2	10,257	24.0	10,399	23.5	10,422	23.2	10,586	22.7	10,521	22.8	10,591	22.7
Refresher	12,796	35.6	13,776	36.3	13,553	33.4	14,608	34.7	14,728	34.5	15,825	35.7	16,030	35.6	17,167	36.9	16,693	36.2	17,199	36.8
Total	35,945	100.0%	37,908	100.0%	40,586	100.0%	42,164	100.0%	42,690	100.0%	44,297	100.0%	44,958	100.0%	46,596	100.0%	46,099	100.0%	46,711	100.0%

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* Totals exclude the District of Columbia.

- In 19 states, additional courses are noted.
- In 28 states, refresher courses are available.

For job titles requiring high school completeion, complete training exists in most states. "Complete" in this case refers to the type of training which a Police Traffic Services Patrolman receives at the Police Academy. However, a college graduate receives two types of training: one before and the other after employment. Currently, almost no training is available (following recruitment) for job titles requiring a bachelor's degree. An example is the Highway Engineer who has a college degree when he is hired, but still needs specialized safety training after employment if he is to be "fully qualified" for assignment to safety related functions. This latter training, which would produce a "finished product," is still largely unavailable in the states. "Complete" in this case is meant only in the sense of entering safety education, which is the most difficult training requirement.

The exhibits indicate that, at the time of the field interviews, the states expected to enroll 35,945 people during 1968 and to expand their enrollment by 10,766 to a total of 46,711 in 1977, equivalent to a 30% gain over the decade.

2. STATE ENROLLMENT EXPANSION IS PROJECTED AT AN UNEVEN ANNUAL GROWTH RATE WITHIN THE 1968 TO 1977 PERIOD

Institutional and state agency officials indicated that they expect enrollments to increase at a faster pace in the initial years of the decade than in the later years. Forty percent of the expansion is projected to take place in the first two years. By 1970, the state estimated enrollment rises to 40,586 persons which represents an absolute gain of 12.9% over 1968. Between 1970 and 1975, enrollment is expected to increase at a more moderate rate. A small decrease in the state-estimated enrollment is forecast for 1976 and the anticipated gain for 1977 is below the average for the decade, in part because institutional and state agency officials made few estimates for those years.

If enrollment growth in 1976 and 1977 is projected on the basis of the average annual rate between 1968 and 1975, total training capacity available in 1977 would be nearly 50,000, rather than 46,711, for a total 10-year enrollment increase of approximately 14,000 or a 38% expansion.

3. OVER ONE-THIRD OF THE CURRICULA AND COURSES IDENTIFIED CURRENTLY PROVIDE "COMPLETE" TRAINING FOR SAFETY SPECIALISTS

With the qualifications noted earlier, an estimated 12,560 persons will be enrolled in courses offering complete training in 1968, equivalent to 34.9% of the total state-estimated enrollment for that year. By 1977, it is estimated that 18,921 persons will be enrolled in programs offering complete training, equivalent to 40.5% of the state-estimated enrollment for that year. This percentage increase will result from an anticipated 50.6% rise in complete training program enrollment coupled with a more moderate 34.4% gain in refresher course enrollment and a constant partial course enrollment. Two additional points are evident from these figures.

4. TRAINING FACILITIES ARE UNEVENLY DISTRIBUTED ACROSS STATES AND THE DISTRICT OF COLUMBIA

The institutional and state agency totals incorporated in this volume are based on visits to all 50 states and the District of Columbia. However, as revealed by the data in Appendixes A and B, the relative contribution of each state to the national totals varies markedly. Training programs for high school graduates tend to be fairly uniform for individual program areas and job titles from state to state. However, training programs for college degree candidates are subject to a much greater state-by-state variance. Nevertheless, the potential problem of a lack of expected training resources in a particular program area or job title in one state tends to be at least partially reduced by the pattern of greater mobility of college students from state to state in both college enrollment and subsequent employment.

5. TRAINING FACILITIES ARE UNEVENLY DISTRIBUTED AMONG PROGRAM AREAS

While a significant amount of safety specialist training exists, this training is not evenly allocated among program areas. The highway safety program standards have been grouped below into four general categories according to the amount of safety specialist training available.

- Program areas for which considerable training exists.
  - Driver Education
  - Alcohol in Relation to Highway Safety
  - Highway Design, Construction and Maintenance
  - Police Traffic Services
- Program areas for which a moderate amount of training exists.
  - Periodic Motor Vehicle Inspection
  - Driver Licensing
  - Traffic Courts
  - Identification and Surveillance of Accident Locations
  - Traffic Control Devices
- Program areas for which little training exists.
  - Planning and Administration
  - Emergency Medical Services
  - Accident Cleanup
  - School Bus Safety

- Program areas for which no training exists.
    - Motor Vehicle Registration
    - Motorcycle Safety
    - Codes and Laws
    - Traffic Records
    - Pedestrian Safety

Highway safety programs for which a substantial amount of training is available are generally those which were well established prior to the initiation of the national highway safety program or which represent well-defined disciplines. As pointed out in Chapter III, at the time of the field visits institutional and state officials had not yet developed training for programs newly created by the national highway safety program standards. A program-by-program analysis of the state safety training program characteristics follows in the order that they are listed above, i. e., starting with those programs for which considerable training exists and concluding with those for which there is no training. The discussion deals with total training activities of all types.

(1) Driver Education

A significant portion of state safety training is Driver Education, and a substantial expansion in total training program enrollment is projected: from 9,164 in 1968 to 12,815 in 1977, equal to approximately a 40% gain. Driver Education training is characterized by numerous courses for Driver Education Teachers and their Supervisors. Driver Education Teacher courses were identified in 38 states and the District of Columbia, reflecting the fact that driver education programs are well developed in most states which, in turn, has created a training need. There are relatively few courses specifically for Driver Training Program Specialists and Driver Retraining Instructors, because the driver retraining program either does not exist or is just beginning in most states. (However, educational programs for Driver Education Supervisors are directly and completely applicable to Driver Training Program Specialists, and educational programs preparing Driver Education Teachers for the entering educational requirements also prepare Driver Retraining Instructors for the entering educational requirements.)

(2) Alcohol in Relation to Highway Safety

While considerable training is available for this program standard in 1968, the states' enrollment estimate drops sharply in 1969 and in succeeding years with the result that only a moderate amount of training will be available subsequently. This downward trend is atypical and demonstrates that to staff this program states may expect to train existing Police Traffic Services Patrolmen rather than recruit new specialized personnel. Training is thus paced by program characteristics and emphasis rather than recruitment or student interest. A downward trend in enrollments occurs only in this program standard. Almost all the training activities which stem from this program are directed toward Breath Examiner Specialists rather than Alcohol Technical Specialists.

(3) Highway Design, Construction, and Maintenance

Safety training enrollment estimates are divided about equally between those for Highway Engineers and those for Engineering Aides-Safety. Twenty-eight states indicated a large number of curricula and courses which offer training for Highway Engineers. In contrast, there is no training available for Highway Safety Site Officers.

(4) Police Traffic Services

This program accounts for the largest state enrollment estimate of any single program standard. A major expansion in enrollment from 14,529 in 1968 to 19,634 in 1977 is envisioned. Training is heavily oriented to the needs of Police Traffic Services Patrolmen rather than to Police Traffic Services Program Specialists.

(5) Periodic Motor Vehicle Inspection

Courses which relate to this program are designed to train Motor Vehicle Station Inspectors rather than Motor Vehicle Inspectors. This reflects the general intention of states to utilize private, rather than state-operated, garages for motor vehicle inspections.

(6) Driver Licensing

Driver License Examiners account for the bulk of the training available in connection with this program standard. Training for Driver License Examiners is offered in 24 states whereas training for Driver License Hearing Officers is indicated in only one state.

(7) Traffic Courts

The states' enrollment estimates for the Traffic Court Judge training program is moderate in 1968. Enrollment is expected to decline slightly in 1970 and to be level thereafter. The small number of enrollees reflects the fact that in many states there is no traffic court system per se, and thus, no perceived need for training Traffic Court Judges or Traffic Court Program Specialists.

(8) Identification and Surveillance of Accident Locations

Safety courses which relate to Identification and Surveillance primarily offer training to Accident Site Investigator Aides. Accident Site Investigator training is available in only one state.

(9) Traffic Control Devices

Twenty-four states identified many safety related curricula and courses which provide training for Traffic Engineers. In contrast, only one state indicated that it offers formal training to Traffic Engineering Aides (as opposed to engineering aides). No state mentioned training programs for Traffic Control Device Technicians.

(10) Planning and Administration

In this program, limited training is available in most states for Highway Safety Program Analysts.

(11) Emergency Medical Services

There is a small amount of training available for both Emergency Medical Services Program Specialists and Emergency Medical Services Field Representatives.

(12) Accident Cleanup

A major expansion in the number of State Wrecker Operators enrolled in training programs from an estimated 40 in 1968 to an estimated 2,040 in 1977 is projected. However, the bulk of the increase is anticipated to occur in one state.

(13) School Bus Safety

Two states identified training for School Bus Program Specialist and one state indicated training for School Bus Driver Training Officer. However, educational programs preparing Driver Education Teachers for the entering educational requirement also prepare School Bus Driver Training Officers for the entering educational requirement.

(14) Motor Vehicle Registration

Volume I identifies no safety specialists for the vehicle registration program, and no training programs for such personnel were identified.

(15) Motorcycle Safety

Because states generally do not approach Motorcycle Safety as a separate program, but instead regard it as an integral part of the Periodic Motor Vehicle Inspection and Driver Licensing programs, all training germane to Motorcycle Safety has been included in these two other program areas.

(16) Codes and Laws

The states did not identify any training which is uniquely related to safety specialists within this program standard, primarily because the specific job title and safety duties are new in state government.

(17) Traffic Records

No safety training comparable to that required by the generalized job descriptions was identified for this program during the field visits. Past training for records analysts has been restricted to general systems and procedures subjects.

(18) Pedestrian Safety

Since the majority of states does not view Pedestrian Safety as a separate program, institutional and state officials did not identify any training courses which pertain specifically to this program area.

6. TRAINING ACTIVITIES ARE UNEVENLY DISTRIBUTED AMONG JOB TITLES

Even though a considerable amount of safety training may be available for safety specialists in a given program area, such training is not necessarily available for all job titles within that program. Exhibit V, following this page, lists those job titles for which no safety specialist training of any type is available in the states.

EXHIBIT V

National Highway Safety Bureau
U. S. Department of Transportation

JOB TITLES FOR WHICH SAFETY SPECIALIST TRAINING IS NOT PROVIDED

Governor's Highway Safety Program Director

Highway Safety Public Information Officer

Motor Vehicle Inspector

Codes and Laws Program Specialist

Traffic Court Program Specialist

Traffic Records Program Analyst

Traffic Records Systems Analyst

Highway Safety Site Officer

Traffic Control Device Technician

Pedestrian Safety Program Specialist*

State Wrecker Field Representative

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* Pedestrian Safety Program Specialists may draw upon training programs designed for Driver Education Supervisors and Driver Education Program Specialists.

V. CONCLUSIONS

V. CONCLUSIONS

On the basis of the information contained in the preceding chapters of this volume, a number of concluding comments can be made.

1. THIS VOLUME PROVIDES A CATALOG OF CURRENT AND PLANNED SAFETY TRAINING ACTIVITIES AT THOSE INSTITUTIONS AND STATE AGENCIES VISITED DURING FIELD INTERVIEWS

The data contained in this report can function as a guide to the overall safety training resources available at those major institutions and state agencies interviewed by Booz, Allen & Hamilton staff. These institutions were selected according to the criteria described in Chapter II and are listed by state in Appendix A.

2. THE FINDINGS IN THIS VOLUME DO NOT ENCOMPASS ALL AVAILABLE EDUCATIONAL TRAINING FACILITIES FOR SAFETY SPECIALISTS

Omitted from the data are those state highway safety training programs at colleges and universities not included within Booz, Allen & Hamilton's field visits. Excluded from visits were many institutions, including many larger universities as well as junior, teachers', and community colleges. These institutions offer numerous courses in safety fields, especially in the areas of driver education and police traffic services. Moreover, for visited institutions, information is presented for established or firmly planned safety and safety-related training. Capacity which could be drawn upon if new courses or expanded enrollments were necessary is not presented. Such capacity might include, for example, medical school faculty who could participate in new training programs for Emergency Medical Services manpower. (It will be recalled that the attempt to gather data on costs to expand existing capability produced unusable results.) Therefore, this volume should not be construed as a complete inventory of all available safety training programs on a nationwide basis, but should be utilized in conjunction with supplementary information.

3. THE FINDINGS IN THIS VOLUME ARE A CONSERVATIVE ESTIMATE OF TRAINING CAPACITY

Findings in this volume are conservative estimates of training capacity.

- They report existing or firmly planned courses and curricula that contribute to training safety specialist manpower rather than on courses and curricula which could be developed.
- They report estimated enrollments as approximations of realistic capacity rather than enrollment estimates themselves. Enrollment numbers are, for this study, not indicators of future graduates, i.e., trained manpower resources, but are indicators of ability to train manpower resources identified in Volume II.

4. THE FINDINGS IN THIS VOLUME WILL BE MATCHED IN THE FINAL VOLUME WITH THE MANPOWER REQUIREMENTS AND RESOURCES DATA DISCUSSED IN PREVIOUS VOLUMES

In Volume IV, the information obtained from states on safety training programs will be matched with the data concerning manpower requirements and resources. The objective will be to determine whether educational capacity is sufficient to train needed safety specialists. Thus, the findings of this volume are designed to be used in conjunction with other volumes comprising the overall report of this study of safety specialist manpower.

APPENDIXES

APPENDIX A

TRAINING PROGRAMS

State: ALABAMA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Alabama													
Civil Engineering		1 Year (E)	Traffic Engineer	2	2	2	3	5	7	8	9	10	10
Theory of Vehicular Traffic Flow	P	1 Semester	Traffic Engineer	0	0	0	0	0	0	0	0	0	0
Design of Urban Highway Systems	P	1 Semester	Traffic Engineer	3*	0	0	0	0	0	0	0	0	0

* This course is being terminated in favor of the sequence of courses contained in the Civil Engineer curriculum above.

TRAINING PROGRAMS

State: ARIZONA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Arizona State University													
Safety Education	P*	14 Weeks	Driver Education Teacher	100	100	125	130	135	140	145	150	150	150
Driver Education I	P*	14 Weeks	Driver Education Teacher	75	85	85	90	90	95	95	100	100	100
Driver Education II	P*	14 Weeks	Driver Education Teacher	30	35	35	36	37	38	39	40	40	40
Organization and Administration of Safety Education	P*	14 Weeks	Driver Education Teacher	40	45	45	46	47	48	49	50	50	50
Pro-Seminar in Driver and Safety Education	P*	14 Weeks	Driver Education Teacher	20	25	25	25	25	25	25	25	25	25
Workshop in Motorcycle Education	P*	8 Weeks	Driver Education Teacher	50	50	50	50	50	50	50	50	50	50
Transportation Engineering	P	14 Weeks	Highway Engineer	33	35	35	36	37	38	39	40	40	40
Traffic Engineering**	P	14 Weeks	Traffic Engineer	12	14	14	16	16	18	18	20	20	20
Highway Geometric Design	P	14 Weeks	Traffic Engineer	9	9	9	10	10	11	11	12	12	12
Motor Vehicle Division-Drivers License Branch													
Orientation for New Examiners	P	16 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
In-Service Training for Examiners	R	24 Hours	Driver License Examiner	76	80	80	85	90	90	95	100	100	100
Arizona Highway Patrol													
In-Service Training for Patrolmen	R	40 Hours	Police Traffic Services Patrolman	250	250	290	310	310	330	330	350	350	350
In-Service Training for New Sergeants	A	40 Hours	Police Traffic Services Patrolman (Sgt.)	0	0	0	0	0	0	0	0	0	0
Recruit School		640 Hours	Police Traffic Services Patrolman	72	73	75	80	90	100	115	125	135	150
Supervisors In-Service Training	R	40 Hours	Police Traffic Services Patrolman	80	85	90	100	110	115	120	125	125	125

* While these courses do not constitute a full curriculum, they do appear to produce a fully trained driver education teacher.

** This course probably will be divided into two courses, 474A and 474B, in 1969 and offered in succeeding semesters.

State: ARKANSAS

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Arkansas Law Enforcement Academy													
Motor Vehicle Inspection		120 Hours	Motor Vehicle Station Inspector	20	20	20	20	20	20	20	20	20	20
Specialized Driver Training	P	60 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
Traffic Safety-State Trooper Recruit Training	P	100 Hours	Police Traffic Services Patrolman	90	90	90	90	90	90	90	90	90	90

TRAINING PROGRAMS

State: CALIFORNIA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
California State College at Los Angeles													
Driver Training Program	P*	11 Weeks	Driver Education Teacher	240	240	240	240	240	240	240	240	240	240
Traffic Simulator Instruction	P*	11 Weeks	Driver Education Teacher	200	200	200	200	200	200	200	200	200	200
Driver Education Curriculum	P*	11 Weeks	Driver Education Teacher	240	240	240	240	240	240	240	240	240	240
Accident and Safety Studies	P*	11Weeks	Driver Education Teacher	280	280	280	280	280	280	280	280	280	280
Organization and Supervision of Safety and Driver Education Programs	P*	11 Weeks	Driver Education Teacher	160	160	160	160	160	160	160	160	160	160
Advanced Studies in Traffic and Safety Education	P*	11 Weeks	Driver Education Teacher	160	160	160	160	160	160	160	160	160	160
Sacramento State College													
Foundations of Safety and Accident Prevention	P	14 Weeks	Driver Education Teacher	30	30	30	30	30	30	30	30	30	30
Essentials of Traffic Safety	P	14 Weeks	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
Driver Instruction	P	14 Weeks	Driver Education Teacher	55	55	55	55	55	55	55	55	55	55
Highway and Airport Engineering	P	14 Weeks	Highway Engineer	15	15	15	15	15	15	15	15	15	15
Traffic Administration and Control	P	14 Weeks	Police Traffic Services Program Specialist	20	20	20	20	20	20	20	20	20	20
Stanford University													
Safety	P	11 Weeks	Driver Education Teacher	25	25	25	25	25	25	25	25	25	25
Transportation Engineering	P	11 Weeks	Highway Engineer	40	40	40	40	40	40	40	40	40	40
Highway Engineering	P	11 Weeks	Highway Engineer	25	25	25	25	25	25	25	25	25	25
Transportation Problems	P	11 Weeks	Traffic Engineer	9	9	9	9	9	9	9	9	9	9
Transportation Planning	P	11 Weeks	Traffic Engineer	9	9	9	9	9	9	9	9	9	9
University of California-Berkeley													
Transportation Engineering		1-3 Years(E)	Traffic Engineer	30	30	30	30	30	30	30	30	30	30
Transportation Policy and Planning	P	10 Weeks	Traffic Engineer	40	40	40	40	40	40	40	40	40	40
Traffic Engineering	P	10 Weeks	Traffic Engineer	30	30	30	30	30	30	30	30	30	30
UCLA													
Urban Transportation Systems	P	11 Weeks	Highway Engineer	25	25	25	25	25	25	25	25	25	25
Street and Highway Design	P	11 Weeks	Highway Engineer	20	20	20	20	20	20	20	20	20	20
Traffic Engineering	P	11 Weeks	Highway Engineer	25	25	25	25	25	25	25	25	25	25

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* While these courses do not constitute a formal curriculum, they appear to produce, upon completion, a fully trained driver education teacher.

State: CALIFORNIA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Southern California													
Transportation Engineering	P	14 Weeks	Traffic Engineer	10	10	10	10	10	10	10	10	10	10
Department of Motor Vehicles													
In-Service for Driver Improvement Analysts	R	32 Hours	Driver Retraining Instructor	150	150	150	150	150	150	150	150	150	150
Examiner Training School		160 Hours	Driver License Examiner	5	5	5	5	5	5	5	5	5	5
In-Service for Driver License Examiners	R	32 Hours	Driver License Examiner	0[1]	0[1]	0	0	0	0	0	0	0	0
Highway Patrol													
Commanders Conference	R	40 Hours	Police Traffic Services Officer	175[3]	175	175	175	175	175	175	175	175	175
Recruit Training		640 Hours	Police Traffic Services Patrolman	500	500	500	500	500	500	500	500	500	500
In-Service for Traffic Officers	R	80 Hours	Police Traffic Services Patrolman	2,000	1,000[2]	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Pre-Supervisory Training	A	80 Hours	Police Traffic Services Patrolman (Sgt.)	40	40	40	40	40	40	40	40	40	40

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[1] No course offered due to lack of funds.

[2] In the future half the trooper force will attend each year so that every 2 years a trooper will have attended one class.

[3] All officers with the rank of lieutenant or above must attend each year.

TRAINING PROGRAMS

State: COLORADO

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Colorado State College													
Basic Driver Education	P		Driver Education Teacher	170	170*	170	170	170	170	170	170	170	170
Advanced Driver Education	P	1 Quarter	Driver Education Teacher	160	160*	160	160	160	160	160	160	160	160
Department of Revenue-Division of Motor Vehicles													
In-Service and OJT Training for Examiners**		1,000 Hours	Driver License Examiner	93	110	115	118	121	124	127	129	129	129
State Patrol													
In-Service Training for Lieutenants	R	40 Hours	Police Traffic Services Officer	23	23	23	24	24	24	25	25	25	25
Recruit Training		320 Hours	Police Traffic Services Patrolman	30	130	30	34	38	42	46	50	50	50
In-Service Training	R	40 Hours	Police Traffic Services Patrolman	349	349	430	454	478	502	526	550	550	550
In-Service Training for Sergeants	R	40 Hours	Police Traffic Services Patrolman (Sgt.)	34	36	36	38	38	38	40	40	40	40
Highway Department													
Training for Debris Removal Units		80 Hours	State Wrecker Operator	0	360	40	40	40	40	40	40	40	40

* If Colorado moves to -100% of the students taking driver education, these figures should double.

** Will be taken by all new examiners.

TRAINING PROGRAMS

State: CONNECTICUT

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Southern Connecticut State College													
Traffic and Safety Education*		1 Year (E)	Driver Training Program Specialist	30	30	30	30	30	30	30	30	30	30
Driver Education and Traffic Safety II	P	1 Semester	Driver Training Program Specialist	10	10	10	10	10	10	10	10	10	10
Driver Education	P	1 Semester	Driver Education Teacher	75	75	75	75	75	75	75	75	75	75
State Police													
State Police Training		640 Hours	Police Traffic Services Patrolman	50	50	100	100	100	100	100	100	100	100

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* Southern Connecticut State College actually offers two curricula for graduate students entitled Traffic and Safety Education. The major difference between them is that one requires a thesis and the other does not.

TRAINING PROGRAMS

State: DELAWARE

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Delaware													
Human Relations and Safety in Industry	A	10 Weeks	Driver Education Supervisor	0	0	0	0	0	0	0	0	0	0
Problems in Safety Education	P	16 Weeks	Driver Education Teacher	10	0	10	0	10	0	10	0	10	0
Transportation Engineering	P	1 Semester	Highway Engineer	12	13	14	14	14	14	14	15	15	15
Traffic Engineering	P	1 Semester	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Advanced Highway Design	P	1 Semester	Traffic Engineer	5	5	6	6	6	6	6	6	6	6
Department of Highways													
State Police Recruit Training		286 Hours	Police Traffic Services Patrolman	30	30	30	30	30	30	30	30	30	30
Traffic	R	8 Hours	Police Traffic Services Patrolman	260	275	290	305	320	335	350	365	365	365
Department of Public Instruction													
Driver Education Teaching	R	25 Hours	Driver Education Teacher	71	74	78	80	84	88	92	96	96	96

TRAINING PROGRAMS

State: DISTRICT OF COLUMBIA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
The American University													
Institute on Driver and Traffic Safety Education	P	1 Semester	Driver Education Teacher	0	30	0	30	0	30	0	30	0	30
Behavioral Aspects of Accident Prevention	P	1 Semester	Driver Education Teacher	0	30	0	30	0	30	0	30	0	30
Law Enforcement *		1-4 Years (E)	Police Traffic Services Officer	3,800	4,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Traffic Planning, Regulation and Control*	P	15 Weeks	Police Traffic Services Officer	3,800	4,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
George Washington University													
Driver and Safety Education (P.E. 261)	P	15 Weeks	Driver Education Teacher	17	15	15	15	15	15	15	15	15	15
Driver and Safety Education (P.E. 262)	P	15 Weeks	Driver Education Teacher	0	15	15	15	15	15	15	15	15	15
Safety Education	P	15 Weeks	Driver Education Teacher	0	20	20	20	20	20	20	20	20	20

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* These estimated enrollment totals were obtained from the records of the university. However, in BA&H's judgment they are 2-3 times too high, since if a student takes two courses, he is counted twice, and if he enrolls in three courses, he is counted three times.

TRAINING PROGRAMS

State: FLORIDA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Florida State University													
Driver and Traffic Safety Education	P	1 Quarter	Driver Education Teacher	90	100	150	155	160	165	170	175	175	175
Teaching of Driver and Traffic Safety Education	P	1 Quarter	Driver Education Teacher	70	115	165	177	189	201	213	225	225	225
Principles of Safety Education	P	1 Quarter	Driver Education Teacher	70	70	105	114	123	132	141	150	150	150
Human Factors and the Highway Safety Problem	P	1 Quarter	Driver Education Teacher	12	15	20	21	22	23	24	25	25	25
University of Florida													
General Safety Education	P	12 Weeks	Driver Education Teacher	35	30	35	35	37	38	40	45	50	50
Driver and Traffic Safety Education	P	12 Weeks	Driver Education Teacher	20	15	20	23	25	28	30	33	35	35
Teaching of Driver and Safety Education	P	12 Weeks	Driver Education Teacher	19	14	20	23	25	28	30	33	35	35
University of Miami													
Driver and Traffic Safety Education I	P	18 Weeks	Driver Education Teacher	30	30	30	30	30	30	30	30	30	30
Driver and Traffic Safety Education II	P	18 Weeks	Driver Education Teacher	30	30	30	30	30	30	30	30	30	30
General Safety	P	18 Weeks	Driver Education Teacher	30	30	30	30	30	30	30	30	30	30
Problems of Driver and Traffic Safety Education	A	18 Weeks	Driver Education Teacher	25*	25	25	25	25	25	25	25	25	25
Psychology of Accident Prevention	P	18 Weeks	Driver Education Teacher	30*	30	30	30	30	30	30	30	30	30
Department of Public Safety-State Patrol													
License Examiner Training	P	40 Hours	Driver License Examiner	35	60	75	75	75	75	75	75	75	75
Recruit Training		480 Hours	Police Traffic Services Patrolman	120	130	145	146	148	149	150	155	160	160
Vehicle Homicide Training	A	40 Hours	Police Traffic Services Patrolman	20	40	42	44	46	46	48	50	50	50

* If the course is taught again.

TRAINING PROGRAMS

State: GEORGIA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Georgia Institute of Technology													
Transportation Engineering		4 Years (E)	Highway Engineer	40	40	40	40	40	40	40	40	40	40
Transportation Engineering I	P	1 Semester(E)	Highway Engineer	650	700	750	760	770	780	790	800	800	800
Transportation Engineering II	P	12 Weeks	Highway Engineer	30	30	30	30	30	30	30	30	30	30
Transportation Engineering		2 Years	Traffic Engineer	20	25	25	25	25	25	25	25	25	25
Pavement Design	P	12 Weeks	Traffic Engineer	15	15	15	15	15	15	15	15	15	15
Highway Administration	P	12 Weeks	Traffic Engineer	7	8	10	11	12	13	14	15	15	15
Highway Design	P	12 Weeks	Traffic Engineer	8	10	10	11	12	13	14	15	15	15
Traffic Engineering	P	12 Weeks	Traffic Engineer	8	9	10	11	12	13	14	15	15	15
Urban Transportation Planning	P	12 Weeks	Traffic Engineer	8	9	10	11	12	13	14	15	15	15
University of Georgia													
Safety Education		1 Year	Driver Education Supervisor	50	60	70	72	74	76	78	80	80	80
Safety Education	P	12 Weeks	Driver Education Supervisor	70	75	80	84	88	92	96	100	100	100
Principles of Traffic Safety	P	12 Weeks	Driver Education Supervisor	70	75	80	84	88	92	96	100	100	100
Practices in Driver Education	P	12 Weeks	Driver Education Supervisor	45	50	55	59	63	67	71	75	75	75
Multiple Car Off-Street Driving Ranges and Simulation in Traffic Education	P		Driver Education Supervisor	50	50	50	55	60	65	70	75	75	75
Administration of School Transportation and Safety Programs	P	12 Weeks	Driver Education Supervisor	15	15	15	15	15	15	15	15	15	15
Behavioral Factors in Traffic Safety	P	12 Weeks	Driver Education Supervisor	17	17	17	20	20	23	23	25	25	25
Seminar for College Instructors and Safety Supervisors	P	2 Weeks	Driver Education Supervisor	15	15	15	15	15	15	15	15	15	15
Department of Public Safety													
Cadet Trooper School		320 Hours	Police Traffic Services Patrolman	50	50	50	50	50	50	50	50	50	50

TRAINING PROGRAMS

State: HAWAII

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Hawaii													
Driver Traffic Safety Education	P	2 Weeks	Driver Education Teacher	45	45	45	45	45	45	45	45	45	45
Course for Driver Training Instructors	P	40 Hours	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
Transportation Engineering	P*		Highway Engineer	0	0	0	0	0	0	0	0	0	0
Advanced Transportation Engineering	P*		Highway Engineer	0	0	0	0	0	0	0	0	0	0
Department of Transportation													
First Aid-Basic and Refresher Course	P	12 Hours	State Wrecker Operator	100	100	100	100	100	100	100	100	100	100

* Course is part of the basic civil engineering curriculum offered by the College of Civil Engineering.

TRAINING PROGRAMS

State: ILLINOIS

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Illinois State University													
Safety and Driver Education		4-7 Years(E)	Driver Education Teacher	750	800	850	880	910	940	970	1,000	1,000	1,000
Northern Illinois University													
Safety and Driver Education		4 Years (E)	Driver Education Teacher	300	380	425	425	425	425	425	425	425	425
Traffic Institute (Northwestern)													
Course for Motor Vehicle Administrators		2-35 Weeks	Motor Vehicle Station Inspector	30	35	35	35	35	35	35	35	35	35
Driver License Administration: Chief Driver Examiner Training	P	2 Weeks	Driver Training Program Specialist	30	35	35	35	35	35	35	35	35	35
Accident Investigation	P	3 Weeks	Accident Site Investigator	80	80	80	80	80	80	80	80	80	80
Highway Capacity Workshop	P	1 Week	Highway Engineer	300	300	300	300	300	300	300	300	300	300
Comprehensive Urban Planning Seminar	P	2 Weeks	Highway Engineer	25	25	25	25	25	25	25	25	25	25
Course for Traffic Engineers	P	2-35 Weeks	Traffic Engineer	150	185	185	185	185	185	185	185	185	185
Transportation Engineering		1-3 Years(E)	Traffic Engineer	28	30	30	30	30	30	30	30	30	30
Traffic Engineering Seminar	P	3 Weeks	Traffic Engineer	80	80	80	80	80	80	80	80	80	80
Administration of Police Training	P	2 Weeks	Police Traffic Services Program Specialist	25	25	25	25	25	25	25	25	25	25
Police Instructor Training	P	3 Weeks	Police Traffic Services Program Specialist	25	25	25	25	25	25	25	25	25	25
The Law for Police	P	3 Weeks	Police Traffic Services Program Specialist	25	25	25	25	25	25	25	25	25	25
Analysis and Administrative Use of Police Traffic Data	P	3 Weeks	Police Traffic Services Program Specialist	25	25	25	25	25	25	25	25	25	25
Personnel Management for Police	P	3 Weeks	Police Traffic Services Program Specialist	20	20	20	20	20	20	20	20	20	20
Principles of Police Management	P	5 Weeks	Police Traffic Services Program Specialist	78	78	78	78	78	78	78	78	78	78
Supervision of Police Personnel	P	3 Weeks	Police Traffic Services Program Specialist	120	120	120	120	120	120	120	120	120	120
Traffic Law Enforcement	P	3 Weeks	Police Traffic Services Program Specialist	80	80	80	80	80	80	80	80	80	80
Traffic Police Administration Training Program	P	9 Months	Police Traffic Services Program Specialist	55	55	55	55	55	55	55	55	55	55
Course for Police	P	2-35 Weeks	Police Traffic Services Program Specialist	400	400	400	400	400	400	400	400	400	400

State: ILLINOIS (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Southern Illinois University													
Driver and Safety Education		4-5 Years	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Transportation and Highway Engineering	P	12 Weeks	Traffic Engineer	3	3	3	3	3	3	3	3	3	3
University of Illinois													
Safety Education		4-5 Years(E)	Driver Education Teacher	65	65	65	65	65	65	65	65	65	65
Traffic Engineering		1-3 Years(E)	Traffic Engineer	7	15	25	27	29	31	33	35	35	35
State Police													
Recruit Training		640 Hours	Police Traffic Services Patrolman	125	125	125	45	45	45	45	45	45	45
Highway Department													
In-Service Training in Transportation Engineering			Highway Engineer	0	0	0	0	0	0	0	0	0	0
Training Seminar for Maintenance Field Engineers	P	24 Hours	Highway Engineer	25	28	30	32	34	36	38	40	40	40
Engineering Technician Training Program	P	33 Hours(E)	Engineering Aide-Safety	165	200	200	200	200	200	200	200	200	200
Specific Task Training	P	8-24 Hours	Engineering Aide-Safety	30	30	30	30	30	30	30	30	30	30
University of Illinois-Police Training Institute													
Traffic Problems and Control	A	48 Hours(E)	Police Traffic Services Officer	0	0	0	0	0	0	0	0	0	0
Traffic Law Enforcement	A	32 Hours(E)	Police Traffic Services Officer	0	0	0	0	0	0	0	0	0	0
Basic Course		160 Hours	Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

State: INDIANA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Indiana State University													
Driver Education		4 Years	Driver Education Teacher	137	140	140	140	140	140	140	140	140	140
Introduction to General Safety	P	16 Weeks	Driver Education Teacher	290	290	290	290	290	290	290	290	290	290
Driver Education	P	16 Weeks	Driver Education Teacher	100	100	100	100	100	100	100	100	100	100
Driver Education	P*	16 Weeks	Driver Education Teacher	80	80	80	80	80	80	80	80	80	80
General Safety and Safety Education	P*	16 Weeks	Driver Education Teacher	50	50	50	50	50	50	50	50	50	50
Traffic Safety	P*	16 Weeks	Driver Education Teacher	75	75	75	75	75	75	75	75	75	75
Indiana University													
Safety Education		4-5 Years (E)	Driver Education Teacher	200	250	300	310	320	330	340	350	350	350
Content and Materials in Safety Education	P	16 Weeks	Driver Education Teacher	132	150	180	180	180	180	180	180	180	180
Techniques of Driver Training and Testing	P	16 Weeks	Driver Education Teacher	105	130	150	150	150	150	150	150	150	150
Organization of Safety Education	P	16 Weeks	Driver Training Program Specialist	115	140	160	160	160	160	160	160	160	160
Driver Education	P	16 Weeks	Driver Training Program Specialist	70	90	105	106	107	108	109	110	110	110
Problems in Driver Education and Highway Safety	P	16 Weeks	Driver Training Program Specialist	90	100	110	112	114	116	118	120	120	120
Police Administration		2-4 Years (E)	Police Traffic Services Officer	25	50	50	60	70	80	90	100	100	100
Traffic Regulation and Control	P	32 Weeks	Police Traffic Services Officer	25	50	50	50	50	50	50	50	50	50
Traffic Surveying and Engineering Techniques	P	16 Weeks	Police Traffic Service Officer	25	0	25	0	25	0	25	0	25	0

* Graduate-level course open to undergraduates.

State: INDIANA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Purdue University													
Driver Education		4 Years	Driver Education Teacher	50	75	100	100	100	100	100	100	100	100
Driver Education	P	16 Weeks	Driver Education Teacher	50	75	100	100	100	100	100	100	100	100
Safety Education	P	16 Weeks	Driver Education Teacher	50	75	100	100	100	100	100	100	100	100
Traffic Education Seminar	P	16 Weeks	Driver Education Teacher	10	10	10	10	10	10	10	10	10	10
Transportation Engineering I	P	16 Weeks	Highway Engineer	45	50	50	52	54	56	58	60	60	60
Transportation Engineering		1-3 Years(E)	Traffic Engineer	15	17	19	20	21	23	24	25	25	25
Traffic Engineering-Characteristics and Measurements	P	16 Weeks	Traffic Engineer	15	17	19	20	21	23	24	25	25	25
Traffic Engineering-Operations and Controls	P	16 Weeks	Traffic Engineer	10	11	12	13	13	14	14	15	15	15
Highway Planning and Economics	P	16 Weeks	Traffic Engineer										
Theory of Traffic Flow	P	16 Weeks	Traffic Engineer	3	4	5	6	7	8	9	10	10	10
Urban Transportation Planning	P	16 Weeks	Traffic Engineer	15	17	19	20	21	23	24	25	25	25
Geometric Design of Highways	P	16 Weeks	Traffic Engineer	15	17	19	20	21	23	24	25	25	25
Indiana University-Medical School													
Alcohol Testing*		40 Hours	Breath Examiner Specialist	60	60	60	60	60	60	60	60	60	60
Indiana University-Department of Police Administration													
Supervision of Chemical Test Programs	P	40 Hours	Alcohol Technical Specialist	30	30	60	60	60	60	60	60	60	60
Breathalyzer Technician Training		40 Hours	Breath Examiner Specialist	120	150	180	180	180	180	180	180	180	180
Purdue University-School of Civil Engineering													
Traffic Engineering Conference	R	40 Hours	Traffic Engineer	25	25	25	25	25	25	25	25	25	25

* This course is the predecessor of the Breathalyzer Technician Training course being given by the Center for Police Training at Indiana University.

State: IOWA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Iowa State University													
Safety Education		4 Years (E)	Driver Education Teacher	630	630	630	630	630	630	630	630	630	630
Collaborative Transportation Planning	P	1 Quarter	Highway Engineer	45	45	45	45	45	45	45	45	45	45
Planning of Transportation Facilities	P	1 Quarter	Highway Engineer	65	75	80	84	88	92	96	100	100	100
Traffic Engineering	P	1 Quarter	Highway Engineer	10	12	14	16	16	18	18	20	20	20
Traffic Planning	P	1 Quarter	Highway Engineer	13	15	18	18	19	19	19	20	20	20
Designing Transportation Facilities	P	1 Quarter	Highway Engineer	51	60	70	74	78	82	86	90	90	90
Traffic Engineering Planning and Analysis	P	1 Quarter	Traffic Engineer	4	4	4	4	4	4	4	4	4	4
Traffic Engineering Design and Control	P	1 Quarter	Traffic Engineer	4	4	4	4	4	4	4	4	4	4
Street and Urban Highway Design	P	1 Quarter	Traffic Engineer	3	3	3	3	3	3	3	3	3	3
Highway Location and Design	P	1 Quarter	Traffic Engineer	3	3	3	3	3	3	3	3	3	3
University of Northern Iowa													
Safety Education		4 Years (E)	Driver Education Teacher	125	175	185	198	211	224	237	250	250	250
Highway Patrol													
Patrol Recruit Course (Licensing Section)	P	25 Hours	Driver License Examiner	10	45	45	45	45	45	45	45	45	45
Highway Patrol Recruit Training		240 Hours	Police Traffic Services Patrolman	10	45	45	45	45	45	45	45	45	45

TRAINING PROGRAMS

State: KANSAS

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Kansas State University													
Transportation Engineering		4 Years (4)	Highway Engineer	12	12	12	12	12	12	12	12	12	12
Transportation Engineering		1 Year (E)	Traffic Engineer	3	3	3	3	3	3	3	3	3	3
Kansas University													
Transportation Engineering	P	17 Weeks	Highway Engineer	50	50	50	55	55	60	60	65	65	65
Traffic Engineering	P	17 Weeks	Highway Engineer	21	28	28	30	31	32	33	35	35	35
Highway Engineering	P	17 Weeks	Highway Engineer	21	28	28	30	31	32	33	35	35	35
Highway Patrol													
Recruit Training School		360 Hours	Police Traffic Services Patrolman	30	30	30	30	30	30	30	30	30	30
In-Service for Troopers	R	40 Hours	Police Traffic Services Patrolman	0	277	0	277	0	277	0	277	0	277

TRAINING PROGRAMS

State: KENTUCKY

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Eastern Kentucky University													
Teacher Preparation in Driver Education	P	16 Weeks	Driver Education Teacher	55	100	150	156	162	168	174	180	180	180
Administration and Supervision of Driver Education	P	16 Weeks	Driver Education Teacher	41	55	100	116	132	148	164	180	180	180
Motor Vehicle Codes and Traffic Records	P	16 Weeks	Police Traffic Services Officer	150	200	200	200	200	200	200	200	200	200
University of Kentucky													
Driver and Traffic Safety Education I	P	16 Weeks	Driver Education Teacher	30	30	30	30	30	30	30	30	30	30
Modern Education	P		Driver Education Teacher	25	25	25	25	25	25	25	25	25	25
Transportation		4 Years (E)	Highway Engineer	45	45	45	46	47	48	49	50	50	50
Transportation Engineering I	P	1 Semester	Highway Engineer	20	20	20	20	20	20	20	20	20	20
Transportation Engineering II	P	1 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Pavement Analysis and Design	P	1 Semester	Highway Engineer	6	6	6	6	6	6	6	6	6	6
Development of Transportation Facilities	P	1 Semester	Highway Engineer	30	40	40	42	44	46	48	50	50	50
Transportation		1-3 Years(E)	Traffic Engineer	5	5	18	20	20	22	22	24	24	24
Highway Traffic Characteristics		1 Semester	Traffic Engineer	12	18	25	25	25	25	25	25	25	25
Highway Location Analysis		1 Semester	Traffic Engineer	6	12	12	12	12	12	12	12	12	12
Urban Transportation Planning		1 Semester	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Operational Effects of Geometrics		1 Semester	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Highway Design Construction and Maintenance		1 Semester	Traffic Engineer	5	5	5	5	5	5	5	5	5	5
Eastern Kentucky University													
Motor Fleet Supervisor Training Course	P	40 Hours	Driver Education Supervisor	30	60	60	60	60	60	60	60	60	60
Police Recruit School	P*	40 Hours*	Police Traffic Services Patrolman	275	275	275	275	275	275	275	275	275	275
Department of Public Safety													
Annual In-Service Training for License Examiners	R	24 Hours	Driver License Examiner	67	69	70	72	74	76	78	80	80	80

* To be expanded to 120-200 hours.
Course was offered only in 1964.

TRAINING PROGRAMS

State: MAINE

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Maine													
Basic Driver Education		120 Hours	Driver Education Program Specialist	30	30	30	30	30	30	30	30	30	30
Traffic and Highway Safety Education	A	120 Hours	Driver Education Teacher	14	14	16	16	18	18	20	20	20	20
Introduction to Highway Engineering	P	15-16 Weeks	Highway Engineer	45	46	46	47	48	49	49	50	50	50
Highway Engineering	P	15-16 Weeks	Highway Engineer	8	9	9	10	10	11	11	12	12	12
Highway Engineering Problems	P	15-16 Weeks	Highway Engineer	8	9	9	10	10	11	11	12	12	12
State Police													
State Police Training		480 Hours	Police Traffic Services Patrolman	34	35	35	36	36	36	37	37	37	37

TRAINING PROGRAMS

State: MARYLAND

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Maryland													
Health Education in Safety		4 Years (E)	Driver Education Teacher	150	170	200	210	220	230	240	250	250	250
First Aid and Safety	P	16 Weeks	Driver Education Teacher	110	115	125	140	155	170	185	200	200	200
Advanced First Aid	P	16 Weeks	Driver Education Teacher	65	75	80	88	96	104	112	120	120	120
Safety Education	P	16 Weeks	Driver Education Teacher	95	110	115	128	141	154	167	180	180	180
The Driver, His Characteristics and Improvement	P	16 Weeks	Driver Education Teacher	90	100	110	121	132	143	154	165	165	165
Essentials of Fire Protection	P	16 Weeks	Driver Education Teacher	9	10	11	12	13	14	15	16	16	16
Fire Protection Organization	P	16 Weeks	Driver Education Teacher	10	11	12	14	15	16	17	18	18	18
Driver Education I	P	16 Weeks	Driver Education Teacher	60	70	80	86	92	98	105	112	112	112
Driver Education II	P	16 Weeks	Driver Education Teacher	50	55	60	66	71	77	82	88	88	88
Organization, Administration and Supervision of School Safety Education	P	16 Weeks	Driver Education Teacher	135	150	165	180	195	210	225	240	240	240
Problems in Driver and Traffic Safety Education	P	16 Weeks	Driver Education Teacher	135	150	165	180	195	210	225	240	240	240
Field Laboratory Projects and Workshop	P	16 Weeks	Driver Education Teacher	135	150	165	180	195	210	225	240	240	240
Civil Engineering (Transportation-Highways)		1 Year (E)	Traffic Engineer	4	7	9	10	11	12	14	15	15	15
Fundamentals of Transportation Engineering	P	1 Semester	Highway Engineer	76	75	80	82	84	86	88	90	90	90
Highway Engineering	P	1 Semester	Highway Engineer	35	40	40	42	44	46	48	50	50	50
Engineering Analysis of Transportation Systems I	P	1 Semester	Traffic Engineer	0	15	15	18	21	24	27	30	30	30
Highway Traffic Characteristics and Measurements	P	1 Semester	Traffic Engineer	4	4	4	6	8	10	12	15	15	15
Highway Traffic Operations	P	1 Semester	Traffic Engineer	3	3	3	5	8	10	13	15	15	15
Transportation Planning I	P	1 Semester	Traffic Engineer	3	3	5	7	9	11	13	15	15	15
Transportation Planning II	P	1 Semester	Traffic Engineer	3	3	3	5	8	10	13	15	15	15
Highway Traffic Flow Theory	P	1 Semester	Traffic Engineer	0	0	4	4	5	6	7	8	8	8
Vocational Education Program-Rescue		2 Years (E)	State Wrecker Operator	40	350	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Rescue I - Basic Skills	P	20 Hours	State Wrecker Operator	0	40	40	100	500	1,000	1,500	2,000	2,000	2,000
Rescue II - Skills	P	20 Hours	State Wrecker Operator	40	350	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Rescue III - Rescue Techniques	P	20 Hours	State Wrecker Operator	40	350	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Rescue IV - Rescue Operations	P	20 Hours	State Wrecker Operator	40	350	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000

State: MARYLAND (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Police													
Inspection Station Supervisor	P	24 Hours	Motor Vehicle Station Inspector	45	47	49	51	53	55	57	59	59	59
Breathalyzer Operation		40 Hours	Breath Examiner Specialist	50	50	50	50	50	50	50	50	50	50
Basic Recruit Course		840 Hours	Police Traffic Services Patrolman	85	150	85	85	85	85	85	85	85	85
In-Service*	R	40 Hours	Police Traffic Services Patrolman	110	800	110	200	400	600	800	1,000	1,000	1,000
Radar	A	24 Hours	Police Traffic Services Patrolman	165	20	20	20	20	20	20	20	20	20
Department of Motor Vehicles													
Basic Examiner Training Course		120 Hours	Driver License Examiner	45	60	60	60	60	60	60	60	60	60
Administrative Office of Courts													
Orientation Seminar	P	8 Hours	Traffic Court Judge	76	76	76	76	76	76	76	76	76	76
Annual Conference for Judges	R	16 Hours	Traffic Court Judge	100	100	70	70	70	70	70	70	70	70
Judges Seminar	P	8 Hours	Traffic Court Judge	100	100	0**	0	0	0	0	0	0	0
Department of Education													
In-Services for Local Driver Education Supervisors	R	8-240 Hours	Driver Education Supervisor	15	15	15	16	17	18	19	20	20	20
State Roads Commission													
In-Service Highway Engineers Training Course		480 Hours(E)	Engineering Aide-Safety	50	50	50	50	50	50	50	50	50	50

* There are 2 courses: 1 for Sergeants, which has more on supervision, and 1 for Corporals and Troopers.

** Under new district court system, this seminar would be replaced by 1-2 day seminars 3 times/year.

TRAINING PROGRAMS

State: MASSACHUSETTS

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Northeastern University													
Law Enforcement		4 Years (E)	Police Traffic Services Officer	500	700	700	700	700	700	700	700	700	700
Tufts University													
Transportation	P	17 Weeks	Highway Engineer	27	29	31	34	37	41	45	50	50	50
Highway and Airport Design	P	17 Weeks	Highway Engineer	23	25	25	26	27	28	29	30	30	30
University of Massachusetts													
Transportation Engineer	P	17 Weeks	Highway Engineer	60	60	60	60	60	60	60	60	60	60
Advanced Transportation	P	17 Weeks	Highway Engineer	10	10	10	10	10	10	10	10	10	10

State: MICHIGAN

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Michigan State University													
Driver Education		4 Years (E)	Driver Education Teacher	85	100	110	118	126	134	142	150	150	150
Driver and Traffic Safety Education I	P	12 Weeks	Driver Education Teacher	120	145	170	176	182	188	194	200	200	200
Driver Education and Traffic Safety II	P	12 Weeks	Driver Education Teacher	170	180	190	192	192	194	198	200	200	200
Implications of Perceptual Psychology	P		Driver Education Teacher	192	192	192	192	192	192	192	192	192	192
Highway Traffic Administration		4 Years (E)	Highway Safety Program Analyst	35	45	60	60	60	60	60	60	60	60
Highway Traffic Administration		1 Year (E)	Driver Training Program Specialist	110	110	110	110	110	110	110	110	110	110
Traffic Engineering		4 Years (E)	Highway Engineer	15	15	15	15	15	15	15	15	15	15
University of Michigan													
Transportation and Traffic Engineering		1-3 Years(E)	Traffic Engineer	18	25	25	26	27	28	29	30	30	30
Traffic Flow I	P	1 Term*	Traffic Engineer	8	8	8	8	8	8	8	8	8	8
Transportation Planning	P	1 Term*	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Traffic Control	P	1 Term*	Taffic Engineer	8	8	8	8	8	8	8	8	8	8
Highway Engineering		1 Year (E)	Traffic Engineer	18	25	25	26	27	28	29	30	30	30
Principles of Pavement Design	P	1 Term*	Traffic Engineer	12	12	12	12	12	12	12	12	12	12
Highway Materials	P	1 Term*	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Geometric Design of Highways and Interchanges	P	1 Term*	Traffic Engineer	7	7	7	7	7	7	7	7	7	7
Department of State--Michigan State University													
Supervisory Development	P	24 Hours	Driver Education Supervisor	20	20	20	20	20	20	20	20	20	20
Driver Improvement	P	40 Hours	Driver Retraining Instructor	60	60	60	60	60	60	60	60	60	60
Driver License Examining		80 Hours	Driver License Examiner	222	222	222	222	222	222	222	222	222	222
Michigan State University													
Traffic Engineering Operations	R	32 Hours	Traffic Engineer	80	80	80	80	80	80	80	80	80	80
Michigan State University--School of Police Administration													
Various Courses in Law Enforcement	A	80 Hours	Police Traffic Services Officer	200	200	200	200	200	200	200	200	200	200

* The University of Michigan operates on a trimester system.

TRAINING PROGRAMS

State: MINNESOTA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Minnesota													
Driver Education I	P	1 Quarter	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Driver Education II	P	1 Quarter	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Safety Education	P	1 Quarter	Driver Education Teacher	70	70	70	70	70	70	70	70	70	70
Highway Department													
Driver License Recruit Training		200 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
Patrol Recruit Training Program		639 Hours	Police Traffic Services Patrolman	38	50	50	50	50	50	50	50	50	50
Bureau of Criminal Apprehension													
Statewide Police Training School		160 Hours	Police Traffic Services Patrolman	500	500	500	500	500	500	500	500	500	500

TRAINING PROGRAMS

State: MISSISSIPPI

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Highway Safety Patrol Recruit School		160 Hours	Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

State: MISSOURI

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Central Missouri State College													
Safety Education		1-3 Years (E)	Driver Education Supervisor	40	40	100	110	120	130	140	150	150	150
Safety Education		4 Years (E)	Driver Education Teacher	200	180	200	220	240	260	280	300	300	300
Law Enforcement		4 Years (E)	Police Traffic Services Officer	300	350	400	420	440	460	480	500	500	500
University of Missouri													
Transportation Engineering		1 Year (E)	Traffic Engineer	6	8	10	11	12	13	14	15	15	15
Transportation Planning and Models	P	16 Weeks	Traffic Engineer	12	12	15	15	15	15	15	15	15	15
Missouri State Highway Patrol													
Alcohol Test Type II*		80 Hours	Breath Examiner Specialist	40	120	120	120	120	120	120	120	120	120
Basic Recruit Training		480 Hours	Police Traffic Services Patrolman	120	120	120	120	120	120	120	120	120	120
Peace Officers School	A	80 Hours	Police Traffic Services Patrolman	300	300	300	300	300	300	300	300	300	300
Auto Club of Missouri													
Missouri Traffic Forum	R	24 Hours	Traffic Examiner	200	200	200	200	200	200	200	200	200	200

* Course also is given as part of Basic Recruit Training.

TRAINING PROGRAMS

State: MONTANA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Montana State University													
Safety Education			Driver Education Teacher	15	15	15	15	15	15	15	15	15	15
Safety Education and Driver Training	P	2 Weeks	Driver Education Teacher	25	25	25	25	25	25	25	25	25	25
Advanced Safety Education and Driver Training	P		Driver Education Teacher	15	15	15	15	15	15	15	15	15	15
State Police													
Driver Licensing In-Service Training	P	60 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
In-Service Training for Patrolman	R	40 Hours	Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

STATE: NEBRASKA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Nebraska													
Driver Education I	P	1 Semester	Driver Education Teacher	60	70	80	84	88	92	96	100	100	100
Driver Education II	P	1 Semester	Driver Education Teacher	50	60	70	74	78	82	86	90	90	90
Education for Safety	P	1 Semester	Driver Education Teacher	110	110	110	112	114	116	118	120	120	120
Transportation Engineering I	P	1 Semester	Highway Engineer	40	45	45	46	47	48	49	50	50	50
Transportation Engineering II	P	1 Semester	Highway Engineer	5	5	5	5	5	5	5	5	5	5
Motor Vehicle Division													
Driver License Examiners Training School*		120 Hours	Driver License Examiner	20	20	20	20	20	20	20	20	20	20
Highway Patrol													
Basic Recruit Course		280 Hours	Police Traffic Services Patrolman	40	40	40	40	40	40	40	40	40	40
Refresher In-Service Course	R		Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0

* Course has been O. J. T. in past and may return to O. J. T. in the future as normal increases and replacements are required.

TRAINING PROGRAMS

State: NEVADA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Nevada													
Driver Education and Training	P	6 Weeks	Driver Education Teacher	35	38	40	41	42	43	44	45	45	45
Transportation Engineering	P	14 Weeks	Highway Engineer	25	25	25	25	25	25	25	25	25	25
Highway Engineering	P	14 Weeks	Highway Engineer	1	1	1	1	1	1	1	1	1	1
Introduction to Traffic Engineering	P	14 Weeks	Highway Engineer	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

State: NEW HAMPSHIRE

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Keene Teachers' College													
Driver Education*	P	12-15 Weeks	Driver Education Teacher	40	40	40	40	40	40	40	40	40	40
Department of Safety													
Trooper Retraining	R	160 Hours	Police Traffic Services Officer**	15	15	15	15	15	15	15	15	15	15
Trooper Recruit School		240 Hours	Police Traffic Services Patrolman	20	25	30	33	36	39	42	45	45	45
Trooper Retraining	R	200 Hours	Police Traffic Services Patrolman	150	177	204	231	258	285	332	383	415	415

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* The implementation of an advanced driver education course which would have an estimated enrollment of 15-17 students is being considered.

** Course is for all personnel from captain through corporal.

TRAINING PROGRAMS

State: NEW JERSEY

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Trenton State Teachers													
Basic Driver Education	P	3 Weeks	Driver Education Teacher	50	50*	50	50	50	50	50	50	50	50
State Police													
Chemical Breath Testing		40 Hours	Breath Examiner Specialist	0	0	0	0	0	0	0	0	0	0
State Police Training		640 Hours	Police Traffic Services Patrolman	100	100	100	100	100	100	100	100	100	100
In-Service Training for Troopers	R		Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0
Motor Vehicle Division													
Motor Vehicle Officers Training		480 Hours	Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0

* This number could increase sharply if the state program goes into effect. Only 3 institutions in New Jersey teach driver education. In addition to Trenton: Montclair with 75-80 graduates a year and Glassboro with 20-25 graduates a year.

TRAINING PROGRAMS

State: NEW MEXICO

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of New Mexico													
Traffic Safety Education in Secondary Schools	P	8 Weeks	Driver Education Teacher	40	40	45	46	47	48	49	50	50	50
Transportation Engineering	P	14 Weeks	Highway Engineer	27	30	30	31	32	33	34	35	35	35
Traffic Engineering	P	14 Weeks	Highway Engineer	10	12	12	13	13	14	14	15	15	15
State Police													
Police Management School	A	40 Hours	Police Traffic Services Officer	50	50	50	50	50	50	50	50	50	50
Supervisors School	R	30 Hours	Police Traffic Services Patrolman (Sgt.*)	0	0	0	0	0	0	0	0	0	0
In-Service School for Officers	A	30 Hours	Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0
Recruit School		320 Hours	Police Traffic Services Patrolman	50	50	60	64	68	72	76	80	80	80
Department of Motor Vehicles													
Annual Workshop for Driver Improvement Personnel	R	24 Hours	Driver Retraining Instructor	0	0	0	0	0	0	0	0	0	0

*Course is offered to lieutenants and captains also.

TRAINING PROGRAMS

State: NEW YORK

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Columbia Teachers College													
Health Education		3 Years (E)	Driver Education Program Specialist	30	30	30	30	30	30	30	30	30	30
Driver and Traffic Safety Education	P	75 Hours	Driver Education Program Specialist	30	30	30	30	30	30	30	30	30	30
Cornell University-Cornell Aeronautical Lab													
Transportation Research			Traffic Records Program Analyst	0	0	0	0	0	0	0	0	0	0
New York University-The Center for Safety													
Safety Education and Accident Prevention		1-3 Years (E)	Driver Education Supervisor	450	550	650	710	770	830	890	950	950	950
Garage Inspection Training	P	40 Hours	Motor Vehicle Station Inspector	25	25	25	25	25	25	25	25	25	25
State Police													
Indoctrination Course for New Lieutenants		80 Hours	Police Traffic Services Officer	0	0	0	0	0	0	0	0	0	0
Basic Recruit Training		240 Hours	Police Traffic Services Patrolman	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Intermediate Course	A	80 Hours	Police Traffic Services Patrolman	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Non-Commissioned Officers Indoctrination Course	P	80 Hours	Police Traffic Services Patrolman	0	0	0	0	0	0	0	0	0	0
Supervisory Training Course	A	70 Hours	Police Traffic Services Patrolman	500	225	250	250	250	250	250	250	250	250

TRAINING PROGRAMS

State: NORTH CAROLINA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment 1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
North Carolina State University													
Transportation Engineering I	P	15 Weeks	Highway Engineer	60	60	60	60	60	60	60	60	60	60
Transportation Engineering II	P	15 Weeks	Highway Engineer	60	60	60	60	60	60	60	60	60	60
MS/Prof Degree in Civil Engineering, Transportation		1 Year (E)	Traffic Engineer	8	8	8	9	9	9	9	10	10	10
Transportation Operations*	P	15 Weeks	Traffic Engineer	12	12	12	12	12	12	12	12	12	12
Transporation Design*	P	15 Weeks	Traffic Engineer	10	10	10	10	10	10	10	10	10	10
Transportation Planning*	P	15 Weeks	Traffic Engineer	12	12	12	12	12	12	12	12	12	12
MS-Transporation Engineering		1 Year (E)	Traffic Engineer	13	13	13	13	13	13	13	13	13	13
Advanced Transportation Design	P	15 Weeks	Traffic Engineer	9	10	15	16	17	18	19	20	20	20
PhD-Transportation Engineering		3 Years (E)	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Univeristy of North Carolina													
Driver Education	P	36 Hours	Driver Education Teacher	50	55	60	63	66	69	72	75	75	75
University of North Carolina, Public Health School													
MPH/MSPH/DPH-Public Health Accident Research		1 Year (E)	Emergency Medical Services Program Specialist	3	4	5	5	5	5	5	5	5	5
MPH-Accident Control Program		1 Year (E)	Emergency Medical Services Program Specialist	5	6	6	6	6	6	6	6	6	6
Accident Control Methods I	P	15 Weeks	Emergency Medical Services Program Specialist	8	8	8	10	11	13	14	16	16	16
Accident Control Methods II	P	15 Weeks	Emergency Medical Services Program Specialist	9	15	20	20	20	20	20	20	20	20
Department of Motor Vehicles-License and Safety Enforcement Division													
In-Service Refresher-PMVI	R	40 Hours	Motor Vehicle Station Inspector	0	85	0	90	0	95	0	99	0	99

* Course also is part of MS-Transportation Engineering and PhD-Transportation Engineering curricula.

State: NORTH CAROLINA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Department of Motor Vehicles-Driver License Division													
In-Service-Driver License Examiners	R	32 Hours	Driver License Examiner	190	223	230	235	240	240	250	256	256	256
Refresher-Driver License Examiners**	R	8 Hours	Driver License Examiner	208	242	250	257	263	269	275	282	282	282
In-Service-Hearing Officers	R	24 Hours	Driver License Hearing Officer	18	19	20	21	22	23	24	26	26	26
Department of Motor Vehicles-Highway Patrol													
Basic Recruit Training-Highway Patrol		520 Hours	Police Traffic Services Patrolman	60	60	60	60	60	60	60	60	60	60
In-Service Training for Highway Patrolman	R	40 Hours	Police Traffic Services Patrolman	900	1,010	1,120	1,230	1,340	1,450	1,500	1,670	1,670	1,670
Highway Patrol													
Training in Chemical Test for Alcohol-Basic		68 Hours	Breath Examiner Specialist	25	25	25	25	25	25	25	25	25	25
Refresher Training for Breath Examiner Specialist	R	28 Hours	Breath Examiner Specialist	0	0	0	0	0	0	0	0	0	0
Univeristy of North Carolina; Institute of Government													
In-Service University of North Carolina	P	40 Hours	School Bus Program Specialist	60	61	63	64	65	67	68	69	69	69
Highway Department													
Highway Engineer in Training		100 Hours	Highway Engineer	30	30	30	30	30	30	30	30	30	30
Cooperative		120 Hours	Engineering Aide-Safety	38	55	75	80	85	90	95	100	100	100
Civil Technicians in Training		40 Hours	Engineering Aide-Safety	30	30	30	30	30	30	30	30	30	30

** This course also is open to Driver License Hearing Officers.

State: NORTH DAKOTA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
North Dakota State University													
Teaching Traffic Safety and Automobile Operation	P	1 Quarter	Driver Education Teacher	7	7	7	7	7	7	7	7	7	7
Driver and Traffic Safety Education II	P	1 Quarter	Driver Education Teacher	7	7	7	7	7	7	7	7	7	7
Organization and Administration of Health and Safety Education	P	1 Quarter	Driver Education Teacher	64	64	64	64	64	64	64	64	64	64
Traffic Engineering	P	1 Semester	Highway Engineer*	0	0	0	0	0	0	0	0	0	0
University of North Carolina													
Transportation Engineering	P	1 Semester	Highway Engineer	80	85	90	92	94	96	98	100	100	100
Traffic Engineering	P	1 Semester	Highway Engineer	0	0	6	6	8	8	10	10	10	10
Geometric Highway Design	P	1 Semester	Highway Engineer	0	0	6	6	8	8	10	10	10	10
Traffic Engineering	P	1 Semester	Traffic Engineer	80	85	90	92	94	96	98	100	100	100
State Toxicology Laboratory													
Breathalyzer Certification		40 Hours	Breath Examiner Specialist	30	30	30	30	30	30	30	30	30	30
Breathalyzer Certification Refresher	R	8 Hours	Breath Examiner Specialist	30	30	30	30	30	30	30	30	30	30
Highway Patrol													
Basic Training		520 Hours	Police Traffic Services Patrolman	17	20	20	20	20	20	20	20	20	20
Field Personnel Annual Review	R	40 Hours	Police Traffic Services Patrolman	66	86	86	90	94	98	102	106	106	106

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* Course has not been offered to date.

TRAINING PROGRAMS

State: OHIO

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Bowling Green University													
Drivers Education for Teachers	P	12 Weeks	Driver Education Teacher	150	150	150	150	150	150	150	150	150	150
Kent State University													
Driver Education for Teachers	P	12 Weeks	Driver Education Teacher	100	100	100	100	100	100	100	100	100	100
Law Enforcement		4 Years	Police Traffic Services Officer	60	80	100	100	100	100	100	100	100	100
Intro. to Highway Traffic Administration	P	12 Weeks	Police Traffic Services Officer	60	80	100	100	100	100	100	100	100	100
Records in Law Enforcement and Public Safety	P	12 Weeks	Police Traffic Services Officer	60	80	100	100	100	100	100	100	100	100
Ohio Northern													
Driver Education	P	2 Weeks	Driver Education Teacher	15	15	15	15	15	15	15	15	15	15
Ohio State University													
Driver Education	P	12 Weeks	Driver Education Teacher	48	48	48	48	48	48	48	48	48	48
Civil Engineering		4 Years (E)	Highway Engineer	50	50	50	50	50	50	50	50	50	50
Transportation and Traffic Engineering		1-3 Years(E)	Traffic Engineer	18	20	25	26	27	28	29	30	30	30
Fundamentals in Traffic Engineering	P	1 Semester(E)	Traffic Engineer	12	14	15	16	17	18	19	20	20	20
Highway Location and Design	P	1 Semester(E)	Traffic Engineer	17	19	21	22	23	23	24	25	25	25
Highway Administration	P	1 Semester(E)	Traffic Engineer	17	19	21	22	23	23	24	25	25	25
Traffic Engineering I	P	1 Semester(E)	Traffic Engineer	17	19	21	22	23	23	24	25	25	25
Traffic Engineering II	P	1 Semester(E)	Traffic Engineer	17	19	21	22	23	23	24	25	25	25
Traffic Engineering III	P	1 Semester(E)	Traffic Engineer	17	19	21	22	23	23	24	25	25	25
Transportation Accident Research Graduate Education Training	P	1Semester(E)	Traffic Engineer	14	14	14	14	14	14	14	14	14	14
Ohio University													
Driver Education		4 Years	Driver Education Teacher	100	100	100	100	100	100	100	100	100	100
Driver Safety Education	P	1 Quarter	Driver Education Teacher	100	100	100	100	100	100	100	100	100	100
Teaching Traffic Safety	P	1 Quarter	Driver Education Teacher	0	15	15	15	15	15	15	15	15	15
Transportation		1 Year (E)	Traffic Engineer	8	9	10	11	12	13	14	15	15	15
Advanced Traffic Engineering	P	12 Weeks	Traffic Engineer	0	10	10	10	10	10	10	10	10	10

State: OHIO (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Cincinnati													
Driver Education	P	26 Weeks	Driver Education Teacher	35	40	80	80	80	80	80	80	80	80
Highway Engineering I and II	P	24 Weeks	Highway Engineer	25	25	25	25	25	25	25	25	25	25
Civil Engineering		1 Year (E)	Traffic Engineer	8	8	8	8	8	8	8	8	8	8
Transportation Engineering Studies	P	1 Quarter	Traffic Engineer	0	8	0	8	0	8	0	8	0	8
Traffic Engineering Design	P	1 Quarter (E)	Traffic Engineer	0	5	0	5	0	5	0	5	0	5
Geometric Design of Highways	P	1 Quarter (E)	Traffic Engineer	7	0	8	0	8	0	8	0	8	0
Transportation Planning	P	1 Quarter (E)	Traffic Engineer	0	7	0	7	0	7	0	7	0	7
Un[illegible] of Toledo													
Transportation I and II	P	24 Weeks	Highway Engineer	28	30	33	36	40	43	47	50	50	50
Highway Economics	P	12 Weeks	Highway Engineer	0	14	0	14	0	14	0	14	0	14
Pavement Design	P	12 Weeks	Highway Engineer	0	14	0	14	0	14	0	14	0	14
Traffic Control	P	12 Weeks	Highway Engineer	6	0	6	0	6	0	6	0	6	0
Department of Education--Trade and Industrial Education Services													
Instructor Training		80 Hours	Emergency Medical Services Field Representative	24	24	24	24	24	24	24	24	24	24

In addition, Ohio has a Highway Patrol Academy. Although it was established primarily to provide training to highway patrol recruits, the academy has ample capacity to provide in-service training to many specialties in highway safety including: Traffic, Driver Examination, and School Bus Inspection. However, none of these is given on a repetitive annual schedule.

TRAINING PROGRAMS

State: OKLAHOMA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Oklahoma State University													
Safety Education	P	17 Weeks	Driver Education Teacher	10	10	10	10	10	10	10	10	10	10
Basic Driver Education	P	17 Weeks	Driver Education Teacher	10	10	10	10	10	10	10	10	10	10
Advanced Driver Education*	P	12 Weeks	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
University of Oklahoma													
Law Enforcement		124 Hours	Police Traffic Services Officer	0	0	0	0	0	0	0	0	0	0
Highway Patrol													
Recruit Training		320 Hours	Police Traffic Services Patrolman	47	47	47	47	47	47	47	47	47	47

* In addition, a course dealing with simulation and driver instruction techniques is planned.

TRAINING PROGRAMS

State: OREGON

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Oregon State University													
Safety Education	P	11 Weeks	Driver Education Teacher	26	26	26	26	26	26	26	26	26	26
Driver Education and Training	P	11 Weeks	Driver Education Teacher	16	16	16	16	16	16	16	16	16	16
Highway Engineering	P	11 Weeks	Highway Engineer	47	47	47	47	47	47	47	47	47	47
Transportation Engineering	P	11 Weeks	Traffic Engineer	10	10	10	10	10	10	10	10	10	10
Department of Motor Vehicles													
In-Service for Driver Improvement Analysis	R	16 Hours	Driver Retraining Instructor	6	6	6	6	6	6	6	6	6	6
In-Service for Driver License Examiners	R	40 Hours	Driver License Examiner	75	75	75	75	75	75	75	75	75	75
State Police													
Recruit School		160 Hours	Police Traffic Services Patrolman	27	27	27	27	27	27	27	27	27	27
In-Service Training for Patrolmen and Sergeants	A	48 Hours	Police Traffic Services Patrolman	480	520	520	520	520	520	520	520	520	520

TRAINING PROGRAMS

State: PENNSYLVANIA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Pennsylvania State University													
Driver and Traffic Safety Education		4-5 Years(E)	Driver Education Teacher	15	15	15	16	17	18	19	20	20	20
General Safety Education	P	10 Weeks	Driver Education Teacher	14	14	15	15	15	15	15	15	15	15
Visual and Other Aids in Safety Education	P	10 Weeks	Driver Education Teacher	12	12	15	15	15	15	15	15	15	15
Teaching Traffic Safety and Auto Operations	P	10 Weeks	Driver Education Teacher	6	6	10	10	10	10	10	10	10	10
Organization and Supervision in Safety Education	P	10 Weeks	Driver Education Teacher	12	12	15	15	15	15	15	15	15	15
Drivers License Conference	P	40 Hours	Driver License Examiner	65	65	65	65	65	65	65	65	65	65
Introduction to Eng. Psychology	P	10 Weeks	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Traffic Engineering Safety*		1-3 Years (E)	Traffic Engineer	0	6	10	11	12	13	14	15	15	15
Transportation Engineering	P	10 Weeks	Traffic Engineer	0	6	10	11	12	13	14	15	15	15
Highway Safety and Traffic Control/Traffic Characteristics of Safety	P	10 Weeks	Traffic Engineer	8	15	20	21	22	23	24	25	25	25
Transportation Operation	P	10 Weeks	Traffic Engineer	0	0	0	0	0	0	0	0	0	0
Highway Geometric Design	P	10 Weeks	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Traffic Officers Training School	P	70 Hours	Police Traffic Services Officer	45	45	90	90	90	90	90	90	90	90
Traffic Command School	P	35 Hours	Police Traffic Services Patrolman (Sgt.)	25	25	100	100	100	100	100	100	100	100
Pupil Transportation Supervision	P	40 Hours	School Bus Driver Training Officer	35	35	35	35	35	35	35	35	35	35
Temple University													
MS Education--Safety		1 Year (E)	Driver Education Supervisor	12	12	13	13	14	14	14	15	15	15
Psychology of Safety and Accident Prevention	P	1 Semester	Driver Education Supervisor	36	0	30	0	32	0	34	35	0	35
Curriculum in Safety Education	P	1 Semester	Driver Education Supervisor	0	30	0	32	0	33	0	35	0	35
Modern Advances in Health Science	P	1 Semester	Driver Education Supervisor	25	30	30	31	32	33	34	35	35	35
Curriculum in Health Education	P	1 Semester	Driver Education Supervisor	25	30	30	31	32	33	34	35	35	35
History and Phil. of Health and Physical Education	P	1 Semester	Driver Education Supervisor	25	30	30	31	32	33	34	35	35	35
Research Methods	P	1 Semester	Driver Education Supervisor	15	20	20	21	22	23	24	25	25	25

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* The Bureau of Highway Traffic at Yale University was scheduled to move to Penn State in July 1968. The difference will be that the curriculum at Penn State will offer an M. S.; at Yale only a certificate was awarded.

State: PENNSYLVANIA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Temple University (Continued)													
Driver Education Workshop	P	1 Semester	Driver Education Teacher	15	15	15	15	15	15	15	15	15	15
Safety and First Aid	P	1 Semester	Driver Education Teacher	45	45	50	51	52	53	54	55	55	55
University of Pennsylvania													
Transportation Engineering	P	1 Semester	Highway Engineer	11	15	20	20	20	20	20	20	20	20
Transportation Engineering		1-3 Years(E)	Traffic Engineer	5	10	12	14	15	17	18	20	20	20
Analysis of Transportation Systems	P	1 Semester	Traffic Engineer	5	10	12	14	15	17	18	20	20	20
Geometric Design of Transportation Systems and Facilities	P	1 Semester	Traffic Engineer	13	15	20	21	22	23	24	25	25	25
Urban Public Transportation	P	1 Semester	Traffic Engineer	3	10	15	17	19	21	23	25	25	25
University of Pittsburgh													
Masters of Education--Safety		1 Year (E)	Driver Education Supervisor	15	20	25	25	25	25	25	25	25	25
Research Readings	P	1 Semester	Driver Education Supervisor	12	12	12	12	12	12	12	12	12	12
Research Seminar	P	1 Semester	Driver Education Supervisor	2	4	5	5	5	5	5	5	5	5
Education for Safe Living	P	1 Semester	Driver Education Supervisor	25	30	30	30	30	30	30	30	30	30
Bachelor's in Educ. --Certification Safety Ed.		4 Years (E)	Driver Education Teacher	0	12	15	16	17	18	19	20	20	20
Introduction to Safety Education	P	1 Semester	Driver Education Teacher	0	15	0	17	0	18	0	20	0	20
First Aid and Disaster Preparedness	P	1 Semester	Driver Education Teacher	0	15	0	17	0	18	0	20	20	20
Occupational Hygiene	P	1 Semester	Driver Education Teacher	15	0	15	0	17	0	18	0	20	0
Water Safety	P	1 Semester	Driver Education Teacher	45	45	45	45	45	45	45	45	45	45
Driver Education	P	1 Semester	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
State Police													
Inspection Station Supervisor Training	P	40 Hours	Motor Vehicle Station Inspector	100	50	50	50	50	50	50	50	50	50
Inspection Station Supervisor In-Service Training	R	8 Hours	Motor Vehicle Station Inspector	170	170	170	176	182	188	194	200	200	200
Driver License Examiner (Civilian) Training		160 Hours	Driver License Examiner	100	450	50	55	60	65	70	75	75	75
Chemical Testing Training	P	8 Hours	Breath Examiner Specialist	2,500	300	350	350	350	350	350	350	350	350
Cadet Training		480 Hours	Police Traffic Services Patrolman	300	300	300	340	380	420	460	500	500	500
In-Service--In Field	A	120 Hours	Police Traffic Services Patrolman	2,100	2,400	2,700	3,100	3,500	3,800	4,200	4,600	4,600	4,600
Leadership I and II: Prepromotion	R	80 Hours	Police Traffic Services Patrolman	72	72	108	115	122	130	137	144	144	144

TRAINING PROGRAMS

State: PENNSYLVANIA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Department of Revenue													
Basic Training Title Examiners	P	75 Hours	Driver License Examiner	30	30	30	32	34	36	38	40	40	40
Department of Public Instruction													
In-Service Training for Dr. Ed. Teachers	R	8-40 Hours	Driver Education Teacher	1,284	1,656	1,965	1,975	1,986	1,996	2,007	2,017	2,017	2,017
Highway Department													
Principles of Traffic Engineering Technology Training	P	40 Hours	Traffic Engineer	44	44	22	22	22	22	22	22	22	22
			Traffic Control Device Technician	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

State: RHODE ISLAND

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Rhode Island College													
Basic Driver Education	P	30 Hours	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
University of Rhode Island													
Transportation Engineering	P	15 Weeks	Highway Engineer	30	30	30	31	32	33	34	35	35	35
Traffic Engineering	P	15 Weeks	Highway Engineer	30	30	30	30	30	30	30	30	30	30
Highway Engineering	P	15 Weeks	Highway Engineer	20	20	20	20	20	20	20	20	20	20
State Police													
State Police Academy		639 Hours	Police Traffic Services Patrolman	20*	20	20	20	20	20	20	20	20	20

* Average enrollment. Could range from 10-30 depending on need.

TRAINING PROGRAMS

State: SOUTH CAROLINA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
South Carolina State College													
Basic Driver Education	P	18 Weeks	Driver Education Teacher	4	32	32	34	35	37	38	40	40	40
Civil or Electrical Tech.		4 Years (E)	Highway Engineer	10	10	10	12	14	16	18	20	20	20
University of South Carolina													
Driver Education I	P	1 Semester	Driver Education Teacher	25	50	75	80	85	90	95	100	100	100
Teacher Training	P	1 Semester	Driver Education Teacher	25	50	75	80	85	90	95	100	100	100
Driver Education	P	1 Semester	Driver Education Teacher	330	100	100	100	100	100	100	100	100	100
Transportation Engineering I	P	1 Semester	Highway Engineer	7	7	7	7	7	7	7	7	7	7
Transportation Engineering II	P	1 Semester	Highway Engineer	0	7	7	7	7	7	7	7	7	7
Masters in Traffic and Transportation Engineering		1 Year (E)	Traffic Engineer	2	4	5	5	5	5	5	5	5	5
Traffic Engineering Characteristics	P	1 Semester	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Traffic Engineering Operations	P	1 Semester	Traffic Engineer	6	6	6	6	6	6	6	6	6	6
Traffic Engineering Geometric Design	P	1 Semester	Traffic Engineer	5	5	5	5	5	5	5	5	5	5
Traffic Flow Theory	P	1 Semester	Traffic Engineer	3	4	5	5	5	5	5	5	5	5
Department of Highways													
Motor Vehicle Inspector Training Program		80 Hours	Motor Vehicle Station Inspector	11	0	11	0	11	0	11	0	11	0
In-Service Training for Driver License Examiners	R	24 Hours	Driver License Examiner	70	92	119	122	125	128	131	134	134	134
Basic Recruit Training		440 Hours	Police Traffic Services Patrolman	70	70	70	72	74	76	78	80	80	80
In-Service--Highway Patrol	R	40 Hours	Police Traffic Services Patrolman	500	560	643	694	746	797	849	900	900	900
Board of Health													
In-Service Breathalyzer Training		40 Hours	Breath Examiner Specialist	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

State: SOUTH DAKOTA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of South Dakota													
Driver Education*	P	1 Semester	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Advanced Driver Education*	P	1 Semester	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Highway Patrol/Highway Department													
Recruit Training Course		240 Hours	Police Traffic Services Patrolman	12	12	12	12	12	12	12	12	12	12
Highway Patrol Refresher Course	R	80 Hours	Police Traffic Services Patrolman	15	15	15	15	15	15	15	15	15	15

* These courses have been approved but not offered. It is envisioned that they will be offered in the near future.

TRAINING PROGRAMS

State: TENNESSEE

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Tennessee													
Health Education		4-5 Years(E)	Driver Education Teacher	25	30	30	36	42	48	54	60	60	60
First Aid and Disaster Education*	P	12 Weeks	Driver Education Teacher	240	240	240	240	240	240	240	240	240	240
First Aid for Elementary Teachers*	P	12 Weeks	Driver Education Teacher	30	60	60	60	60	60	60	60	60	60
Driver Education and Training	P	12 Weeks	Driver Education Teacher	50	50	50	50	50	50	50	50	50	50
Traffic Safety Education	P	12 Weeks	Driver Education Teacher	20	60	60	60	60	60	60	60	60	60
Accident Prevention and Safety Education	P	12 Weeks	Driver Education Teacher	50	60	60	58	56	54	52	50	50	50
Problems and Research in Accident Prevention	P	12 Weeks	Driver Education Teacher	18	30	30	30	30	30	30	30	30	30
Transportation		1 Year (E)	Traffic Engineer	6	8	10	11	12	13	14	15	15	15
Traffic Engineering	P	12 Weeks	Highway Engineer	15	20	20	20	20	20	20	20	20	20
Traffic Problems Analysis	P	12 Weeks	Highway Engineer	8	8	8	8	8	8	8	8	8	8
Traffic Engineering--Characteristics	P	12 Weeks	Traffic Engineer	15	15	15	15	15	15	15	15	15	15
Traffic Engineering--Operations	P	12 Weeks	Traffic Engineer	0	15	15	15	15	15	15	15	15	15
Urban Transportation Planning	P	12 Weeks	Traffic Engineer	3	5	5	5	5	5	5	5	5	5
Tennessee Law Enforcement Training Academy													
Law Enforcement Courses	P	40-120 Hours	Police Traffic Services Patrolman	1,440	1,920	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Basic Police School		120-231 Hrs.	Police Traffic Services Patrolman	240	500	500	550	600	650	700	750	750	750
Accident Investigation	P	120 Hours	Accident Site Investigator Aide	40	40	40	40	40	40	40	40	40	40
Command School		120 Hours(E)	Police Traffic Services Officer	80	80	80	80	80	80	80	80	80	80
Traffic Law Enforcement		120 Hours	Police Traffic Services Patrolman	40	40	40	40	40	40	40	40	40	40
Police Supervisory School	A	120 Hours	Police Traffic Services Patrolman (Sgt. **)	120	120	120	144	168	192	216	240	240	240

* Course leads to Red Cross certificates.

** Also is for lieutenants.

State: TEXAS

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Texas A & M University													
Driver Education	P	13 Weeks	Driver Education Teacher	15	17	18	18	18	18	18	18	18	18
Southern Methodist University													
Highway Engineering	P	1 Semester	Highway Engineer	5	6	6	6	6	6	6	6	6	6
Highway Engineering and Administration	P	13 Weeks	Traffic Engineer	8	5	5	6	6	7	7	8	8	8
Highway Design	P	13 Weeks	Traffic Engineer	6	5	8	8	8	8	8	8	8	8
Highway Safety and Traffic Control	P	13 Weeks	Traffic Engineer	6	5	8	8	8	8	8	8	8	8
Texas Tech College													
Methods and Tecniques of Driver Education	P	6 Weeks	Driver Education Teacher	16	17	18*	18	18	18	18	18	18	18
University of Houston													
Methods of Teaching Driver Education	P	14 Weeks	Driver Education Teacher	30	33	35	36	37	38	39	40	40	40
Basic Driver Education	P	14 Weeks	Driver Education Teacher	35	35	35	35	35	35	35	35	35	35
Advanced Driver Training Techniques	P	14 Weeks	Driver Education Teacher	25	28	30	31	32	33	34	35	35	35
University of Texas													
Highway Engineering Option		4 Years (E)	Highway Engineer	8	10	12	14	15	17	18	20	20	20
Highway Engineering	P	14 Weeks	Highway Engineer	25	25	30	30	30	30	30	30	30	30
Highway Engineering Design	P	14 Weeks	Highway Engineer	10	10	13	14	16	17	19	20	20	20
Masters Degree in Highway Engineering		1 Year (E)	Traffic Engineer	5	6	7	8	8	9	9	10	10	10
Department of Public Safety													
Highway Patrol Training		520 Hours	Police Traffic Services Patrolman	50	75	100	100	100	100	100	100	100	100
In-Service Highway Patrol Training	A	120-160 Hrs.	Police Traffic Services Patrolman	867	2,118	2,145	2,175	2,205	2,235	2,265	2,279	2,279	2,279
Motor Vehicle Inspection In-Service Training	A	120 Hours	Motor Vehicle Station Inspector	173	424	429	435	441	447	453	456	456	456
Driver License In-Service Training	A	120 Hours	Drivers License Examiner	173	424	429	435	441	447	453	456	456	456
Highway Patrol In-Service Training	A	160 Hours	Police Traffic Services Patrolman	173	424	429	435	441	447	453	456	456	456

* Texas Tech is contemplating making this course a year-round one which would triple the enrollment by 1975.

TRAINING PROGRAMS

State: UTAH

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Utah													
Health Education		4 Years (E)	Driver Education Teacher	20	20	22	23	23	24	24	25	25	25
Driver Education, Introduction	P	11 Weeks	Driver Education Teacher	20	20	22	23	23	24	24	25	25	25
Driver Education, Advanced	P	11 Weeks	Driver Education Teacher	20	20	22	23	23	24	24	25	25	25
Special Problems in Driver Education	P	Varies*	Driver Education Teacher	40	40	42	43	43	44	44	45	45	45
Transportation Engineering	P	11 Weeks	Highway Engineer	35	35	35	36	37	38	39	40	40	40
Highway and Traffic Engineering	P	11 Weeks	Highway Engineer	20	22	22	23	23	24	24	25	25	25
Highway Traffic Characteristics	P	11 Weeks	Traffic Engineer	2	2	2	3	3	3	4	4	4	4
Highway Traffic Operations and Control	P	11 Weeks	Traffic Engineer	2	2	2	3	3	3	4	4	4	4
Highway Design	P	11 Weeks	Traffic Engineer	2	2	3	3	4	4	4	5	5	5
Utah State University													
Driver and Safety Education		4 Years (E)	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
Driver Education and Traffic Safety	P	11 Weeks	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
Teaching Driving and Safety Education	P	11 Weeks	Driver Education Teacher	20	20	20	20	20	20	20	20	20	20
Problems in Driver and Safety Education	P	11 Weeks	Driver Education Teacher	24	24	24	24	24	24	24	24	24	24
Driver Training Teacher Workshop	P	5 Weeks	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Safety and First Aid Instruction	P	11 Weeks	Driver Education Teacher	90	90	90	91	92	93	94	95	95	95
Department of Public Safety													
Seminar for License Examiners	R	16 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
In-Service Training Workshop for Driver License Division	R	16 Hours	Driver License Examiner	123	123	123	123	123	123	123	123	123	123
Highway Patrol													
Basic Police Training Course		160 Hours	Police Traffic Services Patrolman	29	29	29	29	29	29	29	29	29	29
In-Service Training for Patrolmen	A	24 Hours	Police Traffic Services Patrolman	200	200	200	200	200	200	200	200	200	200

* Summer workshops (2 weeks) and seminars.

TRAINING PROGRAMS

State: VERMONT

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Vermont													
Driver Education	P	1 Semester*	Driver Education Teacher	30	25	0	0	0	0	0	0	0	0
Driver Education, Advanced	P	1 Semester*	Driver Education Teacher	30	25	0	0	0	0	0	0	0	0
Department of Motor Vehicles													
Recruit Examiner Training		360 Hours	Driver License Examiner	1	1	1	1	1	1	1	1	1	1
In-Service Refresher	R	40 Hours	Driver License Examiner	23	23	23	23	23	23	23	23	23	23
State Police													
Intoximeter Training	P	8 Hours	Breath Examiner Specialist	15	15	15	15	15	15	15	15	15	15
Recruit Training		400 Hours	Police Traffic Services Patrolman	25	25	25	25	25	25	25	25	25	25
In-Service Training	R	40 Hours	Police Traffic Services Patrolman	167	182	189	214	240	266	292	318	318	318
Highway Department													
In-Service Technical Training	R	24 Hours	Engineering Aide-Safety	80	50	40	40	40	40	40	40	40	40

* Course is offered for 3 weeks in the summer only.

TRAINING PROGRAMS

State: VIRGINIA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
College of William and Mary													
First Aid, Safety and Driver Education	P	1 Semester	Driver Education Teacher	75	75	75	78	81	84	87	90	90	90
University of Virginia													
Principles of Physical Education and Safety Education	P	15-16 Weeks	Driver Education Teacher	8	8	8	11	15	18	22	25	25	25
Driver Education and Traffic Safety	P	15-16 Weeks	Driver Education Teacher	25	25	25	25	25	25	25	25	25	25
MS or DS in Civil Engineering		1 Year (E)	Traffic Engineer	3	0	3	0	3	0	3	0	3	0
Transportation Engineering	P	1 Semester	Highway Engineer	35	35	36	37	38	39	39	40	40	40
Advanced Transportation	P	1 Semester	Highway Engineer	15	18	20	21	22	23	24	25	25	25
Rigid and Flexible Pavement Design	P	1 Semester	Traffic Engineer	0	3	0	3	0	3	0	3	0	3
Paving Materials	P	1 Semester	Traffic Engineer	3	0	3	0	3	0	3	0	3	0
Location and Geometric Design of Highways	P	1 Semester	Traffic Engineer	0	3	0	3	0	4	0	5	0	5
Traffic Engineering Operations	P	1 Semester	Traffic Engineer	1	1	1	2	2	3	4	5	5	5
Urban Transportation Planning	P	1 Semester	Traffic Engineer	0*	0	0	0	0	0	0	0	0	0
Virginia Highway Research Council													
Summer Undergraduate Training Program	P	3 Months	Highway Engineer	3	3	4	4	5	5	5	6	6	6
Graduate Assistantship	P	2-3 Years	Traffic Engineer	5	6	7	8	8	9	9	10	10	10
Department of Motor Vehicles													
Examiners Training School		140 Hours	Driver License Examiner	135	140	200	202	204	206	208	210	210	210
Related Subjects	P	8 Hours	Driver License Examiner	135	140	200	202	204	206	208	210	210	210
The Driver	P	8 Hours	Driver License Examiner	135	140	200	202	204	206	208	210	210	210
Examiners Manual	P	16 Hours	Driver License Examiner	135	140	200	202	204	206	208	210	210	210
Public Relations	P	4 Hours	Driver License Examiner										
Supervising Examiners Meeting	R	12 Hours	Driver License Examiner	8	10	12	13	13	14	14	15	15	15
Highway Department													
Traffic Engineer Seminar		64 Hours	Traffic Engineer	10	10	10	11	11	11	12	12	12	12
In-Service Training		120 Hours	Engineering Aide-Traffic	10	10	10	11	11	11	12	12	12	12

* Never offered on account of no demand.

State: VIRGINIA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Police													
Supervisory Training	R	24 Hours	Police Traffic Services Officer	106	112	118	124	130	136	142	148	148	148
Supervision of MV Inspection Program	R	1-2 Hours	Motor Vehicle Station Inspector	95	100	110	115	120	125	130	135	135	135
Recruit Training-Basic Training		760 Hours	Police Traffic Services Patrolman	85*	85	85	85	85	85	85	85	85	85
In-Service Training	R	40 Hours	Police Traffic Services Patrolman	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150
Motor Vehicle Inspection Program	R	1-2 Hours	Motor Vehicle Station Inspector	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150
Review of Accident Investigation, Procedures and Reports	R	1-2 Hours	Accident Site Investigator Aide	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150
Motor Vehicle Code-In-Service School	R	4 Hours	Police Traffic Services Patrolman	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150
Highway Safety	R	1-2 Hours	Police Traffic Services Patrolman	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150

* Average figure; annual enrollment is expected to be in a range of 80-90.

TRAINING PROGRAMS

State: WASHINGTON

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Washington													
Principles of Safety Education	P	11 Weeks	Driver Education Teacher	122	122	122	122	122	122	122	122	122	122
Driver Education, Introductory	P	40 Hours	Driver Education Teacher	60	60	70	71	72	73	74	75	75	75
Driver Education, Advanced	P	40 Hours	Driver Education Teacher	60	65	70	72	74	76	78	80	80	80
Transportation Engineering I	P	11 Weeks	Highway Engineer	75	75	75	75	75	75	75	75	75	75
Transportation Engineering II	P	11 Weeks	Highway Engineer	17	17	17	17	17	17	17	17	17	17
Traffic Engineering--Fundamentals	P	11 Weeks	Highway Engineer	24	24	24	24	24	24	24	24	24	24
Individual Research	P	11 Weeks	Highway Engineer*	0	0	0	0	0	0	0	0	0	0
Traffic Engineering--Analysis	P	11 Weeks	Traffic Engineer	12	12	12	12	12	12	12	12	12	12
Traffic Engineering--Administration	P	11 Weeks	Traffic Engineer	10	10	10	10	10	10	10	10	10	10
Traffic Engineering--Planning	P	11 Weeks	Traffic Engineer	12	12	12	12	12	12	12	12	12	12
Traffic Engineering--Design	P	11 Weeks	Traffic Engineer	7	7	7	7	7	7	7	7	7	7
Transportation Safety Seminar	P	11 Weeks	Traffic Engineer*	0	0	0	0	0	0	0	0	0	0
Department of Motor Vehicles													
Orientation for New Persons		100 Hours	Driver Retraining Instructor	0	0	0	0	0	0	0	0	0	0
In-Service for Driver Improvement Analysts	R	16 Hours	Driver Retraining Instructor	10	10	12	13	13	14	14	15	15	15
In-Service for Supervisors in Driver License Division			Driver License Examiner	0	0	0	0	0	0	0	0	0	0
In-Service for Driver License Examiner	R	32 Hours	Driver License Examiner	185	185	190	195	200	205	210	215	215	215

* Enrollment varies according to individual student demand.

State: WASHINGTON (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Patrol													
Trooper Cadet School		480 Hours	Police Traffic Services Patrolman	90	90	120	126	132	138	144	150	150	150
In-Service for Troopers	R	24 Hours	Police Traffic Services Patrolman	300	300	300	300	300	300	300	300	300	300
Sergeants Basic Training	A	40 Hours	Police Traffic Services Patrolman (Sgt.)	0	0	0	0	0		0	0	0	0
Sergeants In-Service Training	R	24 Hours	Police Traffic Services Patrolman (Sgt.)	0	0	0	0	0	0	0	0	0	0
University of Washington--Summer Institute for Traffic Safety--In-Service Training													
Transportation Safety--Traffic Engineering Fundamentals	A	40 Hours	Driver Education Teacher	50	50	50	50	50	50	50	50	50	50
Transportation Safety--Traffic Engineering Fundamentals	A	40 Hours	Driver Education Teacher	50	50	50	50	50	50	50	50	50	50
Transportation Safety--Highway Design and Traffic Control	A	40 Hours	Driver Education Teacher	50	50	50	50	50	50	50	50	50	50

TRAINING PROGRAMS

State: WEST VIRGINIA

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of West Virginia													
Safety Education		4-5 Years(E)	Driver Education Teacher	125	125	125	125	125	125	125	125	125	125
Principles of Safety Education	P	1 Semester	Driver Education Teacher	150	160	175	180	185	190	195	200	200	200
Techniques and Procedures in Driver and Traffic Safety Education	P	1 Semester	Driver Education Teacher	25	25	25	25	25	25	25	25	25	25
Programs in Safety Education	P	1 Semester	Driver Education Teacher	35	35	40	42	44	46	48	50	50	50
Problems in Driver and Traffic Safety Education	P	1 Semester	Driver Education Teacher	40	45	60	64	68	72	76	80	80	80
Driver and Traffic Safety Education Programs	P	1 Semester	Driver Education Supervisor	40	45	60	64	68	72	76	80	80	80
Philosophy of Safety Education	P	1 Semester	Driver Training Program Specialist	40	40	45	48	51	54	57	60	60	60
Organization,Administration and Supervision of School Safety Education	P	1 Semester	Driver Training Program Specialist	35	40	45	46	47	48	49	50	50	50
Individual Research Problems in Safety Education	P	1 Semester	Driver Training Program Specialist	3	3	3	4	4	4	5	5	5	5
Measurement in Health Education, Physical Education, Safety Education	P	1 Semester	Driver Training Program Specialist	30	30	40	43	46	49	52	55	55	55
Problems in Health Education, Physical Education, and Safety Education	P	1 Semester	Driver Training Program Specialist	30	30	40	43	46	49	52	55	55	55
Introduction to Research	P	1 Semester	Driver Training Program Specialist	30	30	40	43	46	49	52	55	55	55
Civil Engineering Degrees*		4-7 Years	Traffic Engineer	17	20	25	26	28	29	30	33	35	35
Highway Engineering	P	1 Semester	Highway Engineer	30	30	30	32	34	36	38	40	40	40
Introduction to Traffic Engineering	P	1 Semester	Highway Engineer	0	5	12	13	13	14	14	15	15	15

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* This curriculum is primarily a Masters Program, but also grants B. S. and PhD degrees.

State: WEST VIRGINIA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Civil Engineering Degrees (continued)													
Highway Laws	P	1 Semester	Traffic Engineer	5	7	10	10	10	10	10	10	10	10
Geometric Design of Highways	P	1 Semester	Traffic Engineer	15	17	20	21	22	23	24	25	25	25
Traffic Engineering Operations	P	1 Semester	Traffic Engineer	12	15	18	18	19	19	19	20	20	20
Introduction to Traffic Flow Theory	P	1 Semester	Traffic Engineer	7	10	14	15	16	18	19	20	20	20
Traffic Engineering Characteristics	P	1 Semester	Traffic Engineer	15	15	20	20	20	20	20	20	20	20
West Virginia State College													
Safety Education		4 Years (E)	Driver Education Teacher	64	80	100	110	120	130	140	150	150	150
Driver Education and Traffic Safety	P	1 Semester	Driver Education Teacher	100	100	100	100	100	100	100	100	100	100
Education for Safety	P	1 Semester	Driver Education Teacher	27	35	40	48	56	64	72	80	80	80
Methods in Teaching Driving	P	1 Semester	Driver Education Teacher	40	55	70	82	94	106	118	130	130	130
Problems in Driving, Traffic and Safety Education	P	1 Semester	Driver Education Teacher	35	50	65	77	89	101	113	125	125	125
Organization and Administration of Safety Education	P	1 Semester	Driver Education Teacher	8	10	13	14	16	17	19	20	20	20
Psychology of Safety	P	1 Semester	Driver Education Teacher	0	0	50	70	90	110	130	150	150	150
Traffic Administration and Enforcement	P	1 Semester	Police Traffic Services Officer	0	40	0	50	0	65	0	80	0	80
Motor Fleet Supervisory Training	P	1 Semester	School Bus Program Specialist	0	0	30	30	30	30	30	30	30	30
Department of Public Safety													
In-Service PMVI	R	24 Hours	Motor Vehicle Station Inspector	15	15	40	41	42	43	43	44	44	44
Supervision of MV Inspection Stations	P	24 Hours	Motor Vehicle Station Inspector	11	11	36	36	36	36	36	36	36	36
Safety Education		80 Hours	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
Driver License Examiner Training		120 Hours	Driver License Examiner	0	24	40	50	60	63	67	70	80	80
Driver License Examiner Refresher Training	R	40 Hours	Driver License Examiner	6	6	24	31	38	46	53	60	60	60
Instructor Training		160 Hours	Police Traffic Services Program Specialist	35	0	0	35	0	0	35	0	0	35
Basic Training Course		800 Hours	Police Traffic Services Patrolman	41	50	100	100	100	100	100	100	100	100
In-Service Training	R	40 Hours	Police Traffic Services Patrolman	323	323	323	323	323	323	323	323	323	323

State: WEST VIRGINIA (continued)

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
State Road Commission													
Recruit Training		80-160 Hours	Engineering Aide-Safety	0	500	500	460	420	380	340	300	300	300
In-Service Training		40-240 Hours	Engineering Aide-Safety	1,200	1,300	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Department of Mental Health													
Conference on Orientation in Alcoholism	A	16 Hours	Police Traffic Services Patrolman	100	100	100	100	100	100	100	100	100	100

TRAINING PROGRAMS

State: WISCONSIN

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Stout State University *													
Safety Education		4 Years (E)	Driver Education Teacher	625	860	940	992	1,044	1,096	1,148	1,200	1,200	1,200
General Safety	P	1 Semester	Driver Education Teacher	162	162	162	162	162	162	162	162	162	162
Driver Education	P	1 Semester	Driver Education Teacher	113	113	113	113	113	113	113	113	113	113
Administration of Driver Education	P	1 Semester	Driver Education Teacher	106	106	106	106	106	106	106	106	106	106
Traffic and Highway Safety	P	1 Semester	Driver Education Teacher	120	120	120	120	120	120	120	120	120	120
Driver Improvement Programs	P	1 Semester	Driver Education Teacher	0	0	0	0	0	0	0	0	0	0
University of Wisconsin													
Safety Education		4-5 Years (E)	Driver Education Teacher	175	200	225	230	235	240	245	250	250	250
City Planning	P**	1 Semester	Highway Engineer	55	60	65	65	65	65	65	65	65	65
Advanced City Planning	P**	1 Semester	Highway Engineer	22	24	25	25	25	25	25	25	25	25
City Planning Design	P**	1 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Municipal Engineering Practice	P**	1 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Surveying I and II	P**	2 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Traffic Control	P**	1 Semester	Highway Engineer	30	35	40	40	40	40	40	40	40	40
Traffic Engineering	P**	1 Semester	Highway Engineer	0	0	15	15	15	15	15	15	15	15
Urban Transportation Engineering	P**	1 Semester	Highway Engineer	8	21	25	25	25	25	25	25	25	25
Geometric Highway Design	P**	1 Semester	Highway Engineer	10	10	10	10	10	10	10	10	10	10
Highway Engineering	P**	1 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Advanced Highway Design	P**	1 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Motor Vehicle Division--Bureau of Highway Safety Promotion													
Regional Traffic Court Conferences	R	8 Hours	Traffic Court Judge	300	300	300	300	300	300	300	300	300	300

*Stout plans to offer additional courses in the future in Traffic Safety Management, School Bus Administration and Supervision, General Safety Education, plus a structured curriculum program that will prepare people for a variety of occupational endeavors in accident prevention and traffic safety. These courses will be offered as the need develops.

**These courses appear to be part of a civil engineering curriculum.

State: WISCONSIN (continued)

Institution/Agency Name **Curriculum/Course** Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Bureau of Enforcement													
Breathalyzer Operator Course	P	16 Hours	Breath Examiner Specialist	20	20	20	20	20	20	20	20	20	20
Breathalyzer Operator Refresher	R	4 Hours	Breath Examiner Specialist	600	600	600	600	600	600	600	600	600	600
Basic Training/Patrol		640 Hours	Police Traffic Services Patrolman	70	70	35	35	35	35	35	35	35	35
Basic Training Refresher/Patrol	R	40 Hours	Police Traffic Services Patrolman	300	300	328	328	328	328	328	328	328	328
Wisconsin Motor Vehicle Department													
Driver License Examiner Trainee School		160 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
In-Service Training for Examiners	R	40 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0

TRAINING PROGRAMS

State: WYOMING

Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Job Title	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
University of Wyoming													
Safety Education	P	1 Semester	Driver Education Teacher	110	130	200	200	200	200	200	200	200	200
Driver Education	P	1 Semester	Driver Education Teacher	100	150	200	200	200	200	200	200	200	200
Geometric Design of Highways	P	1 Semester	Highway Engineer	0	0	0	0	0	0	0	0	0	0
Traffic Engineering Operations	P	1 Semester	Highway Engineer	15	15	16	16	16	16	16	16	16	16
Traffic Engineering: Urban Planning	P	1 Semester	Highway Engineer	10	10	11	11	11	11	11	11	11	11
Department of Revenue--Motor Vehicle Department													
Driver License Examiner		160 Hours	Driver License Examiner	0	0	0	0	0	0	0	0	0	0
Highway Department													
Engineering Technician Development Program	A	80 Hours	Engineering Aide--Safety	20	20	40	45	50	55	60	70	80	80
Night School for Employees of the Traffic Division	R	48 Hours	Engineering Aide--Traffic	0	0	0	0	0	0	0	0	0	0
Basic Training Course		184 Hours	Police Traffic Services Patrolman	8	8	8	8	8	8	8	8	8	8
Bi-annual Training	R	40 Hours	Police Traffic Services Patrolman	0	104	0	109	0	114	0	120	0	120

APPENDIX B

State: ALABAMA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Traffic Control Devices										
Traffic Engineer										
Complete	2	2	2	3	5	7	8	9	10	10
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: ARIZONA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	100	100	125	130	135	140	145	150	150	150
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	76	80	80	85	90	90	95	100	100	100
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	33	35	35	36	37	38	39	40	40	40
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	12	14	14	16	16	18	18	20	20	20
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	72	73	75	80	90	100	115	125	135	150
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	250	250	290	310	310	330	330	350	350	350

State: ARKANSAS

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	20	20	20	20	20	20	20	20	20	20
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	90	90	90	90	90	90	90	90	90	90
Refresher	0	0	0	0	0	0	0	0	0	0

State: CALIFORNIA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	360	360	360	360	360	360	360	360	360	360
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Retraining Instructor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	150	150	150	150	150	150	150	150	150	150
Driver Licensing										
Driver License Examiner										
Complete	5	5	5	5	5	5	5	5	5	5
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	80	80	80	80	80	80	80	80	80	80
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	19	19	19	19	19	19	19	19	19	19
Refresher	0	0	0	0	0	0	0	0	0	0

State: CALIFORNIA (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Police Traffic Services										
Police Traffic Services Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	20	20	20	20	20	20	20	20	20	20
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	175	175	175	175	175	175	175	175	175	175
Police Traffic Services Patrolman										
Complete	500	500	500	500	500	500	500	500	500	500
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	2, 000	1, 000	1, 000	1, 000	1, 000	1, 000	1, 000	1, 000	1, 000	1, 000

State: COLORADO

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	170	170	170	170	170	170	170	170	170	170
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	93	110	115	118	121	124	127	129	129	129
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	23	23	23	24	24	24	25	25	25	25
Police Traffic Services Patrolman										
Complete	30	130	30	34	38	42	46	50	50	50
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	349	349	430	454	478	502	526	550	550	550
Accident Clean-Up										
State Wrecker Operator										
Complete	0	360	40	40	40	40	40	40	40	40
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: CONNECTICUT

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Training Program Specialist										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	75	75	75	75	75	75	75	75	75	75
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	50	50	100	100	100	100	100	100	100	100
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: DELAWARE

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	10	10	10	10	10	10	10	10	10	10
Refresher	71	74	78	80	84	88	92	96	96	96
Highway Design, Construction and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	12	13	14	14	14	14	14	15	15	15
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	6	6	6	6	6	6	6	6	6	6
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	260	275	290	305	320	335	350	365	365	365

State: DISTRICT OF COLUMBIA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	50	20	50	20	50	20	50	20	50
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	3, 800	4, 000	5, 000	5, 000	5, 000	5, 000	5, 000	5, 000	5, 000	5, 000
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: FLORIDA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	155	175	230	242	256	269	283	300	305	305
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	35	60	75	75	75	75	75	75	75	75
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	120	130	145	146	148	149	150	155	160	160
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: GEORGIA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Supervisor										
Complete	50	60	70	72	74	76	78	80	80	80
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	40	40	40	40	40	40	40	40	40	40
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	20	25	25	25	25	25	25	25	25	25
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	50	50	50	50	50	50	50	50	50	50
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: HAWAII

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	45	45	45	45	45	45	45	45	45	45
Refresher	0	0	0	0	0	0	0	0	0	0
Accident Clean-Up										
State Wrecker Operator										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	100	100	100	100	100	100	100	100	100	100
Refresher	0	0	0	0	0	0	0	0	0	0

State: ILLINOIS

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	35	35	35	35	35	35	35	35	35	35
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education										
Driver Training Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	30	35	35	35	35	35	35	35	35	35
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	1,115	1,245	1,340	1,370	1,400	1,430	1,460	1,490	1,490	1,490
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Identification and Surveillance										
Accident Site Investigator										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	80	80	80	80	80	80	80	80	80	80
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	325	328	330	332	334	336	338	340	340	340
Refresher	0	0	0	0	0	0	0	0	0	0
Engineering Aide-Safety										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	165	200	200	200	200	200	200	200	200	200
Refresher	0	0	0	0	0	0	0	0	0	0

State: ILLINOIS (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Traffic Control Devices										
Traffic Engineer										
Complete	7	15	25	27	29	31	33	35	35	35
Partial	153	188	188	188	188	188	188	188	188	188
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	400	400	400	400	400	400	400	400	400	400
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Patrolman										
Complete	125	125	125	45	45	45	45	45	45	45
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: INDIANA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Training Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	90	100	110	112	114	116	118	120	120	120
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	387	405	540	550	560	570	580	590	590	590
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Alcohol										
Alcohol Technical Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	30	30	60	60	60	60	60	60	60	60
Refresher	0	0	0	0	0	0	0	0	0	0
Breath Examiner Specialist										
Complete	180	210	240	240	240	240	240	240	240	240
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	45	50	50	52	54	56	58	60	60	60
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	15	17	19	20	21	23	24	25	25	25
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	25	25	25	25	25	25	25	25	25	25

State: INDIANA (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Police Traffic Services										
Police Traffic Services Officer										
Complete	25	50	50	60	70	80	90	100	100	100
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: IOWA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	755	805	815	828	841	854	867	880	880	880
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	10	45	45	45	45	45	45	45	45	45
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	65	75	80	84	88	92	96	100	100	100
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	4	4	4	4	4	4	4	4	4	4
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	10	45	45	45	45	45	45	45	45	45
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: KANSAS

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	12	12	12	12	12	12	12	12	12	12
Partial	50	50	50	55	55	60	60	65	65	65
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	3	3	3	3	3	3	3	3	3	3
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	277	0	277	0	277	0	277	0	277

State: KENTUCKY

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Supervisor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	30	60	60	60	60	60	60	60	60	60
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	85	130	180	186	192	198	204	210	210	210
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	67	69	70	72	74	76	78	80	80	80
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	45	45	45	46	47	48	49	50	50	50
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	5	5	18	20	20	22	22	24	24	24
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	150	200	200	200	200	200	200	200	200	200
Refresher	0	0	0	0	0	0	0	0	0	0

State: KENTUCKY (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Police Traffic Services Patrolman										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	275	275	275	275	275	275	275	275	275	275
Refresher	0	0	0	0	0	0	0	0	0	0

State: MAINE

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Program Specialist										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	45	46	46	47	48	49	49	50	50	50
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	34	35	35	36	36	36	37	37	37	37
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MARYLAND

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	45	47	49	51	53	55	57	59	59	59
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education										
Driver Education Supervisor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	15	15	15	16	17	18	19	20	20	20
Driver Education Teacher										
Complete	150	170	200	210	220	230	240	250	250	250
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	45	60	60	60	60	60	60	60	60	60
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Courts										
Traffic Court Judge										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	76	76	76	76	76	76	76	76	76	76
Refresher	100	100	70	70	70	70	70	70	70	70
Alcohol										
Breath Examiner Specialist										
Complete	50	50	50	50	50	50	50	50	50	50
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MARYLAND (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Highway Design, Construction, and Maintenance										
Engineering Aid-Safety										
Complete	50	50	50	50	50	50	50	50	50	50
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	4	7	9	10	11	12	14	15	15	15
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	85	85	85	85	85	85	85	85	85	85
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	110	800	110	200	400	600	800	1,000	1,000	1,000
Accident Clean-Up										
State Wrecker Operator										
Complete	40	350	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MASSACHUSETTS

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	87	89	91	94	97	101	105	110	110	110
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	500	700	700	700	700	700	700	700	700	700
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MICHIGAN

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Planning and Administration										
Highway Safety Program Analyst										
Complete	35	45	60	60	60	60	60	60	60	60
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education										
Driver Training Program Specialist										
Complete	110	110	110	110	110	110	110	110	110	110
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Supervisor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	20	20	20	20	20	20	20	20	20	20
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	85	100	110	118	126	134	142	150	150	150
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Retraining Instructor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	60	60	60	60	60	60	60	60	60	60
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	222	222	222	222	222	222	222	222	222	222
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	15	15	15	15	15	15	15	15	15	15
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MICHIGAN (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Traffic Control Devices										
Traffic Engineer										
Complete	36	50	50	52	54	56	58	60	60	60
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	80	80	80	80	80	80	80	80	80	80

State: MINNESOTA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	70	70	70	70	70	70	70	70	70	70
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	538	550	550	550	550	550	550	550	550	550
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MISSOURI

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Supervisor										
Complete	40	40	100	110	120	130	140	150	150	150
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	200	180	200	220	240	260	280	300	300	300
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Alcohol										
Breath Examiner Specialist										
Complete	40	120	120	120	120	120	120	120	120	120
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	6	8	10	11	12	13	14	15	15	15
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	200	200	200	200	200	200	200	200	200	200
Police Traffic Services										
Police Traffic Services Officer										
Complete	300	350	400	420	440	460	480	500	500	500
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Patrolman										
Complete	120	120	120	120	120	120	120	120	120	120
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: MONTANA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	15	15	15	15	15	15	15	15	15	15
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: NEBRASKA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	110	110	110	112	114	116	118	120	120	120
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	20	20	20	20	20	20	20	20	20	20
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	40	45	45	46	47	48	49	50	50	50
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	40	40	40	40	40	40	40	40	40	40
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: NEVADA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	35	38	40	41	42	43	44	45	45	45
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	25	25	25	25	25	25	25	25	25	25
Refresher	0	0	0	0	0	0	0	0	0	0

State: NEW HAMPSHIRE

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	40	40	40	40	40	40	40	40	40	40
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	15	15	15	15	15	15	15	15	15	15
Police Traffic Services Patrolman										
Complete	20	25	30	33	36	39	42	45	45	45
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	150	177	204	231	258	285	332	383	415	415

State: NEW JERSEY

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	50	50	50	50	50	50	50	50	50	50
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	100	100	100	100	100	100	100	100	100	100
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: NEW MEXICO

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	40	40	45	46	47	48	49	50	50	50
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	27	30	30	31	32	33	34	35	35	35
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	50	50	60	64	68	72	76	80	80	80
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: NEW YORK

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	25	25	25	25	25	25	25	25	25	25
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education										
Driver Education Program Specialist										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Supervisor										
Complete	450	550	650	710	770	830	890	950	950	950
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: NORTH CAROLINA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	85	0	90	0	95	0	99	0	99
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	50	55	60	63	66	69	72	75	75	75
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	208	242	250	257	263	269	275	282	282	282
Driver License Hearing Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	18	19	20	21	22	23	24	26	26	26
Alcohol										
Breath Examiner Specialist										
Complete	25	25	25	25	25	25	25	25	25	25
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Emergency Medical Services										
Emergency Medical Services Program Specialist										
Complete	5	6	6	6	6	6	6	6	6	6
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: NORTH CAROLINA (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	60	60	60	60	60	60	60	60	60	60
Refresher	0	0	0	0	0	0	0	0	0	0
Engineering Aide-Safety										
Complete	38	55	75	80	85	90	95	100	100	100
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	13	13	13	13	13	13	13	13	13	13
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	60	60	60	60	60	60	60	60	60	69
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	900	1,010	1,120	1,230	1,340	1,450	1,560	1,670	1,670	1,670
School Bus Safety										
School Bus Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	60	61	63	64	65	67	68	69	69	69
Refresher	0	0	0	0	0	0	0	0	0	0

State: NORTH DAKOTA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	64	64	64	64	64	64	64	64	64	64
Refresher	0	0	0	0	0	0	0	0	0	0
Alcohol										
Breath Examiner Specialist										
Complete	30	30	30	30	30	30	30	30	30	30
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	30	30	30	30	30	30	30	30	30	30
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	80	85	90	92	94	96	98	100	100	100
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	80	85	90	92	94	96	98	100	100	100
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	17	20	20	20	20	20	20	20	20	20
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	66	86	86	90	94	98	102	106	106	106

State: OHIO

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	100	100	100	100	100	100	100	100	100	100
Partial	348	353	393	393	393	393	393	393	393	393
Refresher	0	0	0	0	0	0	0	0	0	0
Emergency Medical Services										
Emergency Medical Services Field Representative										
Complete	24	24	24	24	24	24	24	24	24	24
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	50	50	50	50	50	50	50	50	50	50
Partial	53	55	58	61	65	68	72	75	75	75
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	34	37	43	45	47	49	51	53	53	53
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	60	80	100	100	100	100	100	100	100	100
Refresher	0	0	0	0	0	0	0	0	0	0

State: OKLAHOMA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	20	20	20	20	20	20	20	20	20	20
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	47	47	47	47	47	47	47	47	47	47
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: OREGON

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	26	26	26	26	26	26	26	26	26	26
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Retraining Instructor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	6	6	6	6	6	6	6	6	6	6
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	75	75	75	75	75	75	75	75	75	75
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	47	47	47	47	47	47	47	47	47	47
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	10	10	10	10	10	10	10	10	10	10
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	27	27	27	27	27	27	27	27	27	27
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: PENNSYLVANIA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	100	50	50	50	50	50	50	50	50	50
Refresher	170	170	170	176	182	188	194	200	200	200
Driver Education										
Driver Education Supervisor										
Complete	27	32	38	38	39	39	39	40	40	40
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	15	27	30	32	34	36	38	40	40	40
Partial	45	45	50	51	52	53	54	55	55	55
Refresher	1,284	1,656	1,965	1,975	1,986	1,996	2,007	2,017	2,017	2,017
Driver Licensing										
Driver License Examiner										
Complete	100	450	50	55	60	65	70	75	75	75
Partial	95	95	95	97	99	101	103	105	105	105
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	100	450	50	55	60	65	70	75	75	75
Partial	95	95	95	97	99	101	103	105	105	105
Refresher	0	0	0	0	0	0	0	0	0	0
Alcohol										
Breath Examiner Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	2,500	300	350	350	350	350	350	350	350	350
Refresher	0	0	0	0	0	0	0	0	0	0

State: PENNSYLVANIA (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	11	15	20	20	20	20	20	20	20	20
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	5	16	22	25	27	30	32	35	35	35
Partial	44	44	22	22	22	22	22	22	22	22
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	45	45	90	90	90	90	90	90	90	90
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Patrolman										
Complete	300	300	300	340	380	420	460	500	500	500
Partial	25	25	100	100	100	100	100	100	100	100
Refresher	72	72	108	115	122	130	137	144	144	144
School Bus Safety										
School Bus Driver Training Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	35	35	35	35	35	35	35	35	35	35
Refresher	0	0	0	0	0	0	0	0	0	0

State: RHODE ISLAND

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	20	20	20	20	20	20	20	20	20	20
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	30	30	30	31	32	33	34	35	35	35
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	20	20	20	20	20	20	20	20	20	20
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: SOUTH CAROLINA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	11	0	11	0	11	0	11	0	11	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education										
Driver Education										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	334	132	132	134	135	137	138	140	140	140
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	70	92	119	122	125	128	131	134	134	134
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	10	10	10	12	14	16	18	20	20	20
Partial	7	7	7	7	7	7	7	7	7	7
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	2	4	5	5	5	5	5	5	5	5
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	70	70	70	72	74	76	78	80	80	80
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	500	580	643	694	746	797	849	900	900	900

State: SOUTH DAKOTA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	12	12	12	12	12	12	12	12	12	12
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	15	15	15	15	15	15	15	15	15	15

State: TENNESSEE

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	25	30	30	36	42	48	54	60	60	60
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Identification and Surveillance										
Accident Site Investigator Aide										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	40	40	40	40	40	40	40	40	40	40
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	6	8	10	11	12	13	14	15	15	15
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	80	80	80	80	80	80	80	80	80	80
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Patrolman										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	1,440	1,920	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Refresher	0	0	0	0	0	0	0	0	0	0

State: TEXAS

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	61	67	71	72	73	74	75	76	76	76
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	8	10	12	14	15	17	18	20	20	20
Partial	5	6	6	6	6	6	6	6	6	6
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	5	6	7	8	8	9	9	10	10	10
Partial	6	5	8	8	8	8	8	8	8	8
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	50	75	100	100	100	100	100	100	100	100
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: UTAH

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	40	40	42	43	43	44	44	45	45	45
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	123	123	123	123	123	123	123	123	123	123
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	35	35	35	36	37	38	39	40	40	40
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	2	2	3	3	4	4	4	5	5	5
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	29	29	29	29	29	29	29	29	29	29
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: VERMONT

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	30	25	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	1	1	1	1	1	1	1	1	1	1
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	23	23	23	23	23	23	23	23	23	23
Alcohol										
Breath Examiner Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	15	15	15	15	15	15	15	15	15	15
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Engineering Aide-Safety										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	80	50	40	40	40	40	40	40	40	40
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	25	25	25	25	25	25	25	25	25	25
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	167	182	189	214	240	266	292	318	318	318

State: VIRGINIA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	968	1,025	1,085	1,140	1,170	1,200	1,255	1,285	1,285	1,285
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	100	100	100	103	106	109	112	115	115	115
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	135	140	200	202	204	206	208	210	210	210
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Identification and Surveillance										
Accident Site Investigator Aide										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	3	3	4	4	5	5	5	6	6	6
Refresher	0	0	0	0	0	0	0	0	0	0

State: VIRGINIA (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Traffic Control Devices										
Traffic Engineer										
Complete	13	10	13	11	14	11	15	12	15	12
Partial	5	6	7	8	8	9	9	10	10	10
Refresher	0	0	0	0	0	0	0	0	0	0
Engineering Aide-Traffic										
Complete	10	10	10	11	11	11	12	12	12	12
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	106	112	118	124	130	136	142	148	148	148
Police Traffic Services Patrolman										
Complete	85	85	85	85	85	85	85	85	85	85
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	873	925	975	1,025	1,050	1,075	1,125	1,150	1,150	1,150

State: WASHINGTON

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	122	122	122	122	122	122	122	122	122	122
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Retraining Instructor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	10	10	12	13	13	14	14	15	15	15
Driver Licensing										
Driver License Examiner										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	185	185	190	195	200	205	210	215	215	215
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	75	75	75	75	75	75	75	75	75	75
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Control Devices										
Traffic Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	12	12	12	12	12	12	12	12	12	12
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	90	90	120	126	132	138	144	150	150	150
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	300	300	300	300	300	300	300	300	300	300

State: WEST VIRGINIA

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Periodic Motor Vehicle Inspection										
Motor Vehicle Station Inspector										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	11	11	36	36	36	36	36	36	36	36
Refresher	15	15	40	41	42	43	43	44	44	44
Driver Education										
Driver Training Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	40	40	45	48	51	54	57	60	60	60
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Supervisor										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	40	45	60	64	68	72	76	80	80	80
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Education Teacher										
Complete	189	205	225	235	245	255	265	275	275	275
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Driver Licensing										
Driver License Examiner										
Complete	0	24	40	50	60	63	67	70	80	80
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Engineering Aide-Safety										
Complete	1,200	1,300	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0

State: WEST VIRGINIA (continued)

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Traffic Control Devices										
Traffic Engineer										
Complete	17	20	25	26	28	29	30	33	35	35
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Program Specialist										
Complete	35	0	0	35	0	0	35	0	0	35
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Officer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	40	0	50	0	65	0	80	0	80
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services Patrolman										
Complete	41	50	100	100	100	100	100	100	100	100
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	323	323	323	323	323	323	323	323	323	323
School Bus Safety										
School Bus Program Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	30	30	30	30	30	30	30	30
Refresher	0	0	0	0	0	0	0	0	0	0

State: WISCONSIN

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	800	1,060	1,165	1,222	1,279	1,336	1,393	1,450	1,450	1,450
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	0	0	0	0	0	0	0	0	0
Traffic Courts										
Traffic Court Judge										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	300	300	300	300	300	300	300	300	300	300
Alcohol										
Breath Examiner Specialist										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	20	20	20	20	20	20	20	20	20	20
Refresher	600	600	600	600	600	600	600	600	600	600
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	55	60	65	65	65	65	65	65	65	65
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	70	70	35	35	35	35	35	35	35	35
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	300	300	328	328	328	328	328	328	328	328

State: WYOMING

	Estimated Enrollment									
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Driver Education										
Driver Education Teacher										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	100	150	200	200	200	200	200	200	200	200
Refresher	0	0	0	0	0	0	0	0	0	0
Highway Design, Construction, and Maintenance										
Highway Engineer										
Complete	0	0	0	0	0	0	0	0	0	0
Partial	15	15	16	16	16	16	16	16	16	16
Refresher	0	0	0	0	0	0	0	0	0	0
Police Traffic Services										
Police Traffic Services Patrolman										
Complete	8	8	8	8	8	8	8	8	8	8
Partial	0	0	0	0	0	0	0	0	0	0
Refresher	0	104	0	109	0	114	0	120	0	120

APPENDIX C

ADDITIONAL TRAINING PROGRAMS
AMBULANCE DRIVER/AMBULANCE ATTENDANT

State	Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Delaware	State Fire Prevention Commission												
	Ambulance Service Training	P	24 Hours	40	45	45	46	47	48	49	50	50	50
Georgia	Department of Public Health												
	Trauma*	P	16 Hours	450	450	450	450	450	450	450	450	450	450
Indiana	Board of Health												
	Emergency Aid and Transportation Institute		40 Hours	0	0	0	0	0	0	0	0	0	0
Maryland	University of Maryland												
	Vocational Ed. Program-												
	Emergency Care			80	240	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Emergency Care I	P	20 Hours	80	320	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Emergency Care II	P	20 Hours	80	320	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Emergency Care III	P	20 Hours	80	320	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
	Emergency Care IV	P	20 Hours	80	320	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
New York													
	First Aid & Handling of Accident Cases	P	24 Hours	375	375	375	375	375	375	375	375	375	375
North Carolina	Board of Health												
	Initial Emergency Care*	P	24 Hours	800	450	250	250	250	250	250	250	250	250

* Course trains ambulance attendant only.

ADDITIONAL TRAINING PROGRAMS
AMBULANCE DRIVER/AMBULANCE ATTENDANT

State	Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Ohio	Department of Education												
	Emergency Victim Care Course	P	30 Hours	800	450	250	250	250	250	250	250	250	250
	Victim Rescue Course	P	20 Hours	100	100	100	100	100	100	100	100	100	100
	Heart and Resuscitation Course	P	12 Hours	800	800	800	800	800	800	800	800	800	800
	Local Hospitals												
	Emergency Room Training Program	P		271	271	271	271	271	271	271	271	271	271
Pennsylvania	Department of Public Health												
	Emergency Medical Service Training	P	22 Hours	2,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500
West Virginia	University of West Virginia												
	Emergency Transportation & Immediate Care	P	16 Hours	100	105	110	120	130	140	150	160	160	160
	Total Estimated Enrollment												
			Complete:	80	240	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
			Partial:	5,336	5,996	4,801	5,812	5,823	5,834	5,845	5,856	5,856	5,856
			Refresher:	0	0	0	0	0	0	0	0	0	0

APPENDIX C (2)

ADDITIONAL TRAINING PROGRAMS
SCHOOL BUS DRIVER

State	Institution/Agency Name Curriculum/Course Title	Status	Length of Training	Estimated Enrollment									
				1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Delaware	Department of Public Instruction School Bus Driver Education	P	8 Hours	35	35	35	35	35	35	35	35	35	35
	School Bus Driver Education Refresher	R	4 Hours	700	735	770	805	840	875	910	945	945	945
Kentucky	Department of Education School Bus Driver Training Course	P	32 Hours	800	800	800	800	800	800	800	800	800	800
Maryland	Department of Education School Bus Driver Retraining	P	8 Hours	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200
Michigan	Department of Education School Bus Driving	P	12 Hours	7,500	7,800	8,100	8,400	8,700	9,000	9,300	9,600	9,600	9,600
North Carolina	Department of Motor Vehicles School Bus Driver Training	P	14 Hours	22,000	25,000	25,500	26,000	26,500	27,000	27,500	28,000	28,000	28,000
South Carolina	Department of Education School Bus Driver Training	P	24 Hours	6,500	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000
Vermont	Department of Motor Vehicles School Bus Driver Preparation	P	4 Hours	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200
		Total Estimated Enrollment											
			Complete:	0	0	0	0	0	0	0	0	0	0
			Partial:	42,235	46,035	46,835	47,635	48,435	49,235	50,035	50,835	50,835	50,835
			Refresher:	700	735	770	805	840	875	910	945	945	945

APPENDIX D

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE ____________________

RESPONDENT ____________________

1. **INSTITUTIONAL TRAINING**	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. NAME OF INSTITUTION	8. LOCATION OF INSTITUTION

9. TYPE OF INSTITUTION

☐ PUBLIC ☐ UNIVERSITY ☐ JUNIOR COLLEGE

☐ PRIVATE ☐ FOUR-YEAR COLLEGE ☐ OTHER, EXPLAIN

10. CURRICULUM PRE-REQUISITES

CURRICULUM OBJECTIVES

CURRICULUM TITLE	DEPARTMENT OR SCHOOL	11. CURRICULUM ☐ CURRENT ☐ PLANNED								DEGREES OR CREDITS	HIGHWAY SAFETY VOCATION(S) FOR WHICH CURRICULUM PROVIDES PREPARATION
		EDUCATION	ENGINEERING	ENFORCEMENT	COURTS	FLEET OPERATIONS	SCHOOL TRANSPORTATION	ADMINISTRATION	OTHER (SPECIFY)		

12. COURSES IN CURRICULUM
(LIST TITLES OF COURSES COMPOSING CURRICULUM)

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE ______________________

RESPONDENT ______________________

1. **INSTITUTIONAL TRAINING**	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. NAME OF INSTITUTION	8. LOCATION OF INSTITUTION
9. CURRICULUM TITLE	10. DEPARTMENT OR SCHOOL

11. ENROLLMENT

TOTAL GRADUATES THROUGH 1966 (CUMULATIVE) ____________

NO. OF EXTENSION GRADUATES THROUGH 1966 (CUMULATIVE) ____________

PRESENT (OR MOST RECENT) TOTAL ENROLLMENT FIGURE ____________

NO. OF TOTAL ENROLLMENT DOING EXTENSION WORK ____________

	1967	1968	1969	1970	1975
ESTIMATED TOTAL ANNUAL ENROLLMENT					
NO. DOING EXTENSION WORK					

12. FINANCIAL SUPPORT

WHO PROVIDES FINANCIAL SUPPORT?

TYPE OF SUPPORT PROVIDED (E.G., SCHOLARSHIPS)?

EARMARKED OR FOR UNSPECIFIED USES?

APPENDIX D (3)

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE____________________

RESPONDENT____________________

1. INSTITUTIONAL TRAINING	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. NAME OF INSTITUTION	8. LOCATION OF INSTITUTION
9. CURRICULUM TITLE	10. DEPARTMENT OR SCHOOL

11. CAPABILITY TO EXPAND ENROLLMENT

WHAT IS THE MAXIMUM ENROLLMENT PER YEAR WITH CURRENT STAFF AND FACILITIES?

WHAT IS THE ESTIMATED CURRENT ANNUAL OPERATING COST FOR THE CURRICULUM?

HOW MANY TOTAL STUDENTS COULD BE TRAINED PER YEAR BY INCREASING OPERATING COSTS (COSTS FOR ITEMS CONSUMED THROUGH USE SUCH AS SALARIES, SUPPLIES, POSTAL CHARGES) BUT WITHOUT INCURRING INVESTMENT COSTS?

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 50%? –

OPERATING +
INVESTMENT +__________
TOTAL +

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 100%?

OPERATING +
INVESTMENT +__________
TOTAL +

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 200%?

OPERATING +
INVESTMENT +__________
TOTAL +

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE ______

RESPONDENT ______

1. INSTITUTIONAL TRAINING	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. NAME OF INSTITUTION	8. LOCATION OF INSTITUTION
9. COURSE TITLE	10. DEPARTMENT OR SCHOOL

11. COURSE DESCRIPTION AND OBJECTIVES

12. COURSE PREREQUISITES	13. COURSE TIMES LENGTH OF COURSE (IN WEEKS) FREQUENCY OF COURSE (ANNUAL, BIANNUAL, OCCASIONAL) HOW LONG HAS COURSE BEEN IN EXISTENCE?
14. COURSE LEVEL 2 YEAR COLLEGE ☐ GRADUATE ☐ 4 YEAR COLLEGE ☐ NONDEGREE ☐	15. CREDIT HOURS SEMESTER CREDITS ______ CERTIFICATE ______ QUARTER CREDITS ______ NO CREDIT ______
16. FINANCIAL SUPPORT WHO PROVIDES FINANCIAL SUPPORT? TYPE OF SUPPORT PROVIDED (E.G., SCHOLARSHIPS)? SPECIFIED OR UNSPECIFIED USES?	17. FOR WHAT TRAFFIC SAFETY POSITION(S) DOES COURSE QUALIFY ENROLLEES?

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE____________________ RESPONDENT____________________________

1. **INSTITUTIONAL TRAINING**	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. NAME OF INSTITUTION	8. LOCATION OF INSTITUTION
9. COURSE TITLE	10. DEPARTMENT OR SCHOOL

11. ENROLLMENT

TOTAL GRADUATES THROUGH 1966 (CUMULATIVE)____________

NO. OF EXTENSION GRADUATES THROUGH 1966 (CUMULATIVE)____________

PRESENT (OR MOST RECENT) TOTAL ENROLLMENT FIGURE ____________

NO. OF TOTAL ENROLLMENT DOING EXTENSION WORK ____________

	1967	1968	1969	1970	1975
ESTIMATED TOTAL ANNUAL ENROLLMENT					
NO. DOING EXTENSION WORK					

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

RESPONDENT __________

STATE __________

1. **INSTITUTIONAL TRAINING**	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. NAME OF INSTITUTION	8. LOCATION OF INSTITUTION
9. COURSE TITLE	10. DEPARTMENT OR SCHOOL

11. CAPABILITY TO EXPAND ENROLLMENT

WHAT IS THE MAXIMUM ENROLLMENT PER YEAR WITH CURRENT STAFF AND FACILITIES?

WHAT IS THE CURRENT ANNUAL OPERATING COST FOR THE COURSE?

HOW MANY TOTAL STUDENTS COULD BE TRAINED PER YEAR BY INCREASING OPERATING COSTS (COSTS FOR ITEMS CONSUMED THROUGH USE SUCH AS SALARIES, SUPPLIES, POSTAL CHARGES) BUT WITHOUT INCURRING INVESTMENT COSTS?

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 50%? – OPERATING $
INVESTMENT $ __________
TOTAL $

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 100%? OPERATING $
INVESTMENT $ __________
TOTAL $

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 200%? OPERATING $
INVESTMENT $ __________
TOTAL $

APPENDIX D (6)

APPENDIX D (7)

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE ____________________

RESPONDENT____________________

1. **IN-SERVICE TRAINING**	2. STATE
3. CONSULTANT	4. DATE
5. CONTACT	6. CONTACT'S TITLE
7. TRAINING FACILITY AND LOCATION	8. PARENT AGENCY
9. COURSE TITLE	10. SPONSORING AGENCY

11. COURSE DESCRIPTION AND OBJECTIVES

12. FOR WHAT TRAFFIC SAFETY POSITION(S) DOES COURSE QUALIFY ENROLLEE?	13. CURRICULUM RELATIONSHIP IS COURSE PART OF A SAFETY CURRICULUM? ☐ YES NO ☐ IF YES, NAME OF CURRICULUM (SEE SHEET _____)
14. COURSE TIMES LENGTH OF COURSE (IN WEEKS) FREQUENCY (ANNUAL, BI-ANNUAL, ETC.) HOW LONG HAS COURSE BEEN IN EXISTENCE?	15. WHO PROVIDES FINANCIAL SUPPORT? TYPE OF SUPPORT PROVIDED (E.G., SCHOLARSHIPS) EARMARKED OR FOR GENERAL PURPOSES.

BOOZ, ALLEN & HAMILTON, INC.

NATIONAL HIGHWAY SAFETY BUREAU

SAFETY SPECIALIST MANPOWER STUDY

FORM APPROVED
BUDGET BUREAU NO. 04-F-7016

STATE ____________

RESPONDENT ____________

1. **IN-SERVICE TRAINING**	2. STATE	3. DATE
4. CONSULTANT	5. CONTACT	6. CONTACT'S TITLE

7. TRAINING FACILITY AND LOCATION	8. PARENT AGENCY
9. COURSE TITLE	10. SPONSORING AGENCY

11. ENROLLMENT

HOW MANY HAVE FINISHED THE COURSE THROUGH FY 1966 (CUMULATIVE)?

PRESENT (OR MOST RECENT) ENROLLMENT FIGURE.

	FY 1967	FY 1968	FY 1969	FY 1970	FY 1975
ESTIMATED TOTAL ANNUAL ENROLLMENT					

12. CAPABILITY TO EXPAND ENROLLMENT

WHAT IS THE MAXIMUM ENROLLMENT PER YEAR WITH CURRENT STAFF AND FACILITIES? ____________

WHAT IS THE ESTIMATED CURRENT ANNUAL OPERATING COST OF THE COURSE? ____________

HOW MANY TOTAL STUDENTS COULD BE TRAINED PER YEAR BY INCREASING OPERATING COSTS (COSTS FOR ITEMS CONSUMED THROUGH USE SUCH AS SALARIES, SUPPLIES, POSTAL CHARGES) BUT WITHOUT INCURRING INVESTMENT COSTS?

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 50%?

OPERATING +
INVESTMENT + ____________
TOTAL +

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 100%?

OPERATING +
INVESTMENT + ____________
TOTAL +

HOW MUCH ADDITIONAL WOULD IT COST IN DIRECT CHARGES TO INCREASE PRESENT MAXIMUM ENROLLMENT BY 200%?

OPERATING +
INVESTMENT + ____________
TOTAL +